

ID50/60

**installation,
commissioning &
configuration
manual**

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1 Introduction

1.1 Manual Purpose

This purpose of this manual is to provide the user with all recommended procedures and full technical details for the successful installation, commissioning and programming of a NOTIFIER ID50 Series Panel.

The descriptions and procedures also apply to the NOTIFIER ID60 panel. Differences between the ID50 and ID60 panels are given in **Appendix 2**.

Procedures described in this manual include appropriate warnings and cautions to guide the user towards adopting safe and methodical work practices during the installation, commissioning and programming phases.

Important Note

This manual must be read, and its content clearly understood, before proceeding with any work relating to the ID50 Series Panel. Damage to the control panel may result from NOT following the recommended procedures described in this manual.

This manual provides all necessary instructions for the ID50 Series Panel and applies only to fire panels fitted with compatible software.

CAUTION: In particular, care must be taken when powering up/down any repeaters.

If there are any areas of doubt, consult your supplier before continuing with the system installation, commissioning and programming.

1.2 System Design and Planning

It is assumed that the system, of which the ID50 Series Panel equipment is a part, has been designed by a competent fire alarm system designer in accordance with the requirements of EN54 Part 14 and any other local codes of practice that are applicable.

The design drawings should clearly show the positions of all the ID50 Series Panel control equipment and field devices.

1.3 General

The ID50 Series Panel is designed for use with NOTIFIER's range of addressable analogue sensors, control and monitoring modules and addressable call points. A unique signalling protocol is used, having digital address and control signals and analogue pulse width monitoring for the reply data from devices.

The serial communications interface operates under RS485 protocol and enables communications between the fire panel and repeaters.

While every effort is made to ensure the accuracy of the content of this manual, the manufacturer reserves the right to change the information without notice.



Only suitably-qualified engineers must install, commission and configure this product



Only fit the electronics module after all the other trades have completed their tasks!

Installation

The ID50 Series Panel is easy to install providing the recommended procedures described in this manual are followed. To avoid inadvertent contamination of the PCB Assembly, the manufacturer recommends it be installed in the back box only after all other trades have completed their tasks.

Commissioning

To commission the ID50 Series Panel, follow the recommended procedures described in this manual. The manufacturer recommends that during commissioning and maintenance, ALL RS485 signal cables are disconnected at the Panel end, BEFORE powering down the system and are connected AFTER powering up the system.

Configuration

To configure the panel and system, carefully read and follow the procedures given in this manual. These procedures describe the menus that are displayed on the Liquid Crystal Display (LCD) Unit.

Refer to the ID50 Series Operating manual (ref: 997-264) for a description of compatible addressable Signalling Loop Circuit (SLC) analogue devices.

1.3.1 Date-dependent Functions

The calendar end date for this product is 31/12/2063 (two thousand and sixty-three) and it will perform correctly up to this date.

The calendar function has not been tested beyond this date.



1.4 CE Marking

This panel is CE Marked to show that it conforms to the requirements of the following European Community Directives:

- Electromagnetic Compatibility Directive 89/336/EEC (and the amending Directives 92/31/EEC, 93/68/EEC)
- Low Voltage Directive 73/23/EEC (and the amending Directive 93/68/EEC).

1.5 EN54 Functions

This fire control panel is designed to comply with the requirements of EN 54 Part 2/4: 1997. In addition to the basic requirements of EN 54-2, the panel may be configured to conform with the following optional functions - the applicable clauses of EN 54-2 are referenced as follows:

Options	Clause
Indications:	
Fault signals from points	8.3
Recording of the number of entries into fire alarm condition	7.13
Controls:	
Coincidence detection	7.12
Delay of the immediate actioning of outputs	7.11
Disablement of each address point	9.5
Test condition	10
Outputs:	
Fire alarm device(s) (Sounders)	7.8
Fire alarm routing equipment	7.9
Fire protection equipment	7.10
Fault warning routing equipment (requires monitoring by fault routing equipment)	8.9

The following features are provided by the Power Supply Unit (PSU) of the ID50 Series Panel to comply with EN 54-4.

Features of the ID50 Power Supply Unit (PSU)	EN54-4 Clause
Derive power from the mains supply	5.1
Derive power from a standby battery source	5.2
Charge and monitor the standby battery/batteries	5.3
Detect and signal various PSU faults	5.4

1.6 Ancillary Functions

The following is a list of ancillary functions that are provided by the ID50 Series panel in addition to the those required by EN54-2/4. These functions are described in the section of this manual as referenced (except those marked thus '*' which are described in **997-264-XXX, ID50 Series Panel - Operating Manual**):

Ancillary Functions	Manual Section Refs.
Site Specific Setup Options	5.5
Access Options	5.9
Voltage Indications	*4.11.7
Control-by-Event	5.7
Output modes	5.7.1
Input type pattern	5.7.9
Disable/enablement	*4.9
Repeater interface	2.7
Self-learn configuration - manual	5.6.1
Self-learn configuration - auto	5.6.2
Module supervision options	5.6.1
Module silence options	5.7.4
Text editing	5.8
Sensor LED blinking on/off	5.5.7
Bell pulsing ratio	5.5.8
Display of alarm count	*4.11.6
Extend delay timer	5.5.3
Sounder Volt-free contact options	4.4.5
Relay drive output option	4.4.6
Extinguishing system features	5.5.4, 5.5.5, 5.5.6, 5.7.1

1.7 Related Documents



This manual only describes the installation, commissioning and configuration of the ID50 Series Panel. All operating functions are covered by the:

- ID50 Series Panel Operating Manual (ref: 997-264-XXX)

Note: 'XXX' is the country code for the manual. For the UK this code is blank.

The Panel can support repeaters via the RS485 communications link. This manual does not provide details about the repeaters; these are described in:

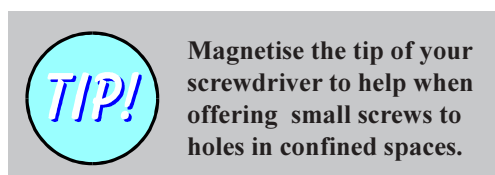
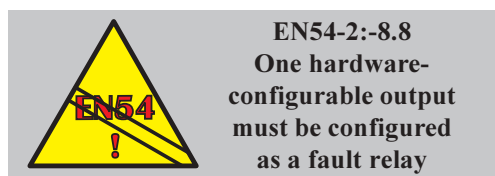
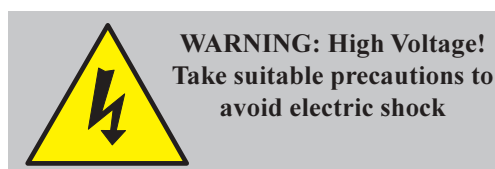
- IDR-2A, -2P & -6A Repeater User Manual (ref: 997-411-XXX).
- IDR Mimic Installation and Commissioning Manual (ref: 997-412-XXX).

Note: 'XXX' is the country code for the manual. For the UK this code is blank.

The ID50 Panel can also support the VIEW™ sensor. This manual does not attempt to cover all the VIEW™ sensor programming and calibration issues as these are described in some detail in the following, which is available from NOTIFIER's Technical Support Department:

- VIEW™ Application Guide (ref: 997-198).

1.8 Warnings and Cautions



Where appropriate, the manual includes advisory warnings and cautions to remind you to consider safety at all times, especially when following the procedures described herein.

You are alerted to any areas where high voltage [i.e. non-Safety Extra-Low Voltage (SELV)] is present, or where there may be a risk of damage to static-sensitive devices if the recommended procedures described in this manual are not followed.

An example of a high voltage warning and an anti-static caution is provided to the left of this paragraph.

The ID50 Series Panel incorporates some features which, if used inappropriately, may contravene the requirements of EN 54. Where there is a possibility of such an occurrence, a suitable warning is given with brief details of the EN 54 requirement. A typical EN 54 non-compliance warning is illustrated at left.

1.9 Tips

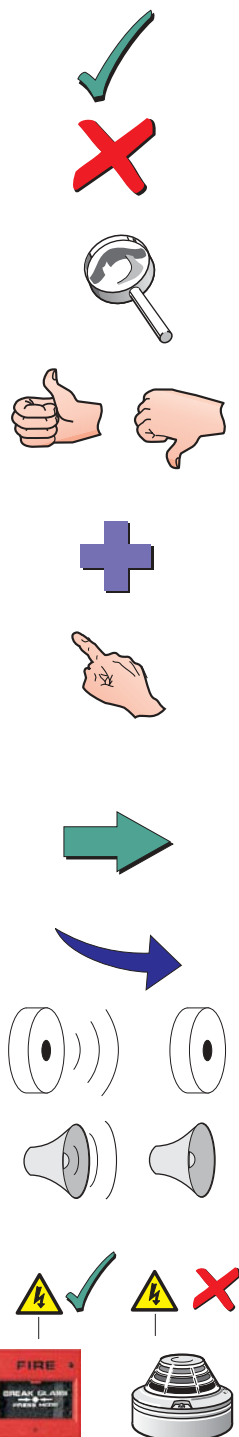
'Handy tips' are included, where appropriate, to assist you in following quick and safe procedures for fire detection system installation and integration.

Look for the 'TIP!' icon and supporting text, typically illustrated at left.

1.10 Glossary of Icons

Throughout this manual, and the other related ID50 Series Panel manuals, a number of icons are used either as part of the illustrated process descriptions, or in the main text to help clarify, or simplify, particular configuration procedures.

The following icons are used to advise or indicate:



- a. DO follow the recommended procedure or method.
- b. DO NOT use this procedure or method.
- c. Inspection of an item or sub-assembly is required at this point.
- d. Following a defined process **meets/does not meet** the required approval/inspection criteria or standards.
- e. Additional items to be considered.
- f. This icon placed next to a pushbutton requires you to press it while configuring the panel. Where two or more icons are used, a number may be placed on or near each hand to indicate the order of selection: 1 coming before 2.
- g. Activity process step - flow arrow for single action or iterative actions.
- h. Leader arrow - used with activity processes.
- i. Internal buzzer operating/not-operating or silenced.
- j. Sounder operating/not-operating or silenced.
- k. Power connected and switched ON/disconnected and switched OFF.
- l. Manual Call Point (MCP)/Sensor.

2 Installation Guide

2.1 How to Use this Section

This Installation Guide provides guidelines on how to install an ID50 Series Panel quickly and safely.

For each stage in the panel installation and commissioning procedures a brief description is given of its purpose, complete with detail drawings, flow diagrams and/or other graphics to make the instructions easy to follow. Where required, procedures may be broken down into one or more related diagrams, the number being dependent upon the complexity of the defined task.

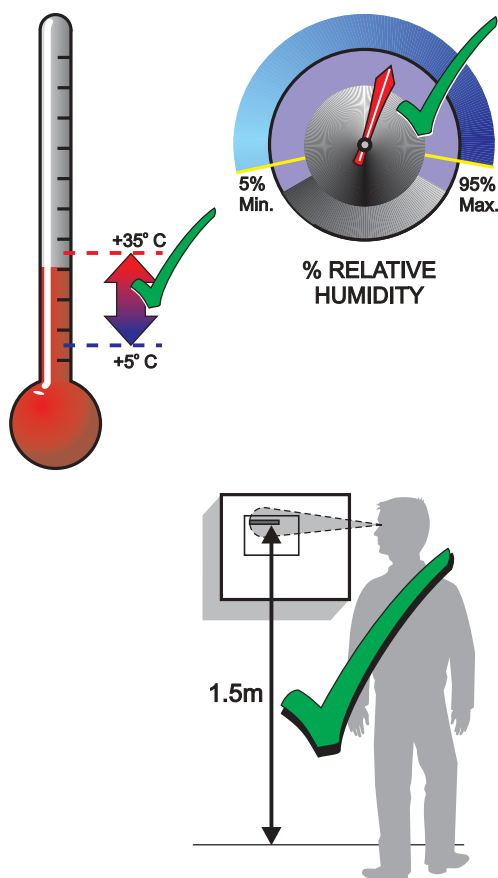
2.2 Pre-installation Check List

Before installing the ID50 Series Panel or fitting sensors, you must first ensure that the following criteria have been met. Failure to do this may not only result in damage to the equipment, but may also cause problems when commissioning the equipment or adversely affect its performance.

2.2.1 Some Panel DO's and DON'T's

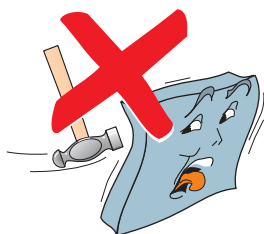
Before selecting a location for the ID50 Series Panel, DO make sure that:

- The operating ambient temperature is in the recommended range:
+5°C to +35°C and
- The relative humidity is between:
5% and 95%
- The panel is wall mounted in a position which allows clear visibility of displays and easy access to operating controls. The height above floor level should be chosen such that the LCD is just above normal eye level (approximately 1.5 metres).

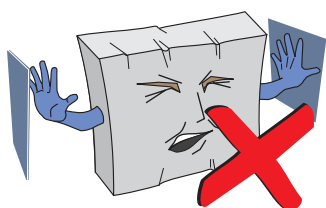




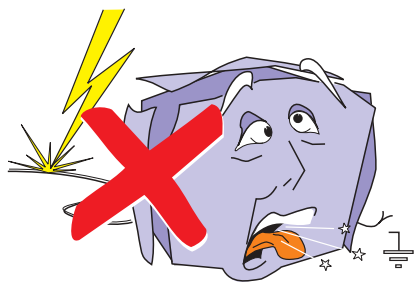
d. DO NOT locate the panel where it is exposed to high levels of moisture.



e. DO NOT locate the panel where there are high levels of vibration or shock.



f. DO NOT site the panel where there would be restricted access to the internal equipment and cabling/wiring connections.



2.3 Transient Protection

This equipment contains transient-protection devices. Although no system is completely immune from lightning transients and interference, for these devices to function correctly, and to reduce susceptibility, this equipment must be earthed correctly.

As with all solid state devices, this system may operate erratically or can be damaged if subjected to lightning-induced transients.

The use of overhead or outside aerial wiring is not recommended due to the increased susceptibility to nearby lightning strikes.

2.4 Product Inspection

The ID50 Series Fire Control Panels are relatively simple to install providing the recommended procedures described in this Installation Guide are followed.

Follow all installation instructions described in this manual. These instructions must be understood and the manufacturer's recommendations followed to avoid damage to the control panel and associated equipment.



2.4.1 Checking Your Panel for Damage

It is important to check all supplied equipment for damage before proceeding with the installation!

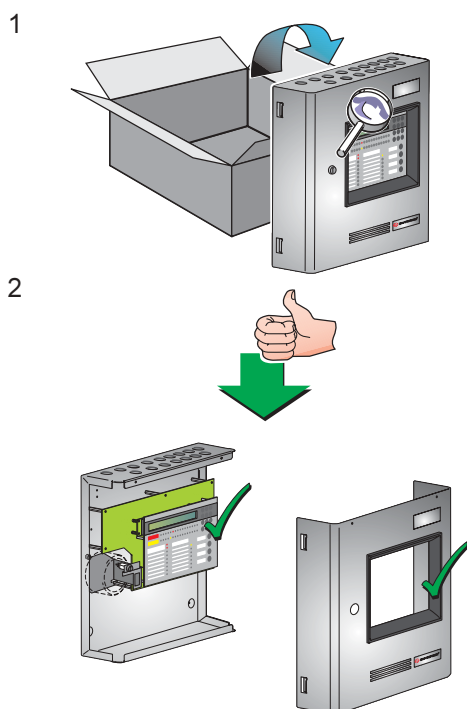
Before attempting to install your ID50 Series Panel, you should do the following:

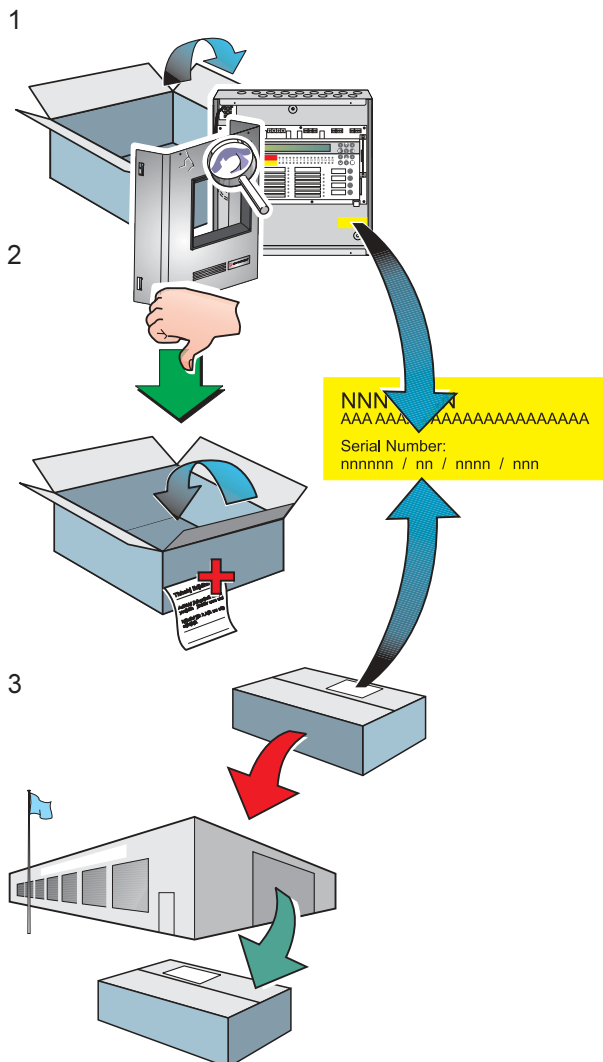
- 1 After removing the panel, from its packing, and before you proceed with installing it in its chosen location, check for any damage that may have been caused during transit.

Note: In the unlikely event that the panel supplied has been damaged, you **MUST NOT** install it but return it to your supplier. The procedure for returning faulty items is described in **Section 2.4.2, What to do if Your Panel is Damaged or Suspect.**

- 2 If you are satisfied that the panel has NOT been damaged you can now proceed with the installation procedure. This manual addresses the recommended installation methods of the panel. Refer to the relevant sections that apply to your configuration requirements.

To prevent unnecessary damage to the electronic components, the back box should be installed without the electronics fitted. Refer to **Sections 2.5.1 to 2.5.3** for details.





If you have problems regarding the quality of any supplied order items including the control panel, its ancillaries or this manual or items are missing, follow the procedure below:

- 1 DO NOT continue with the installation but contact your supplier for advice on what to do next.

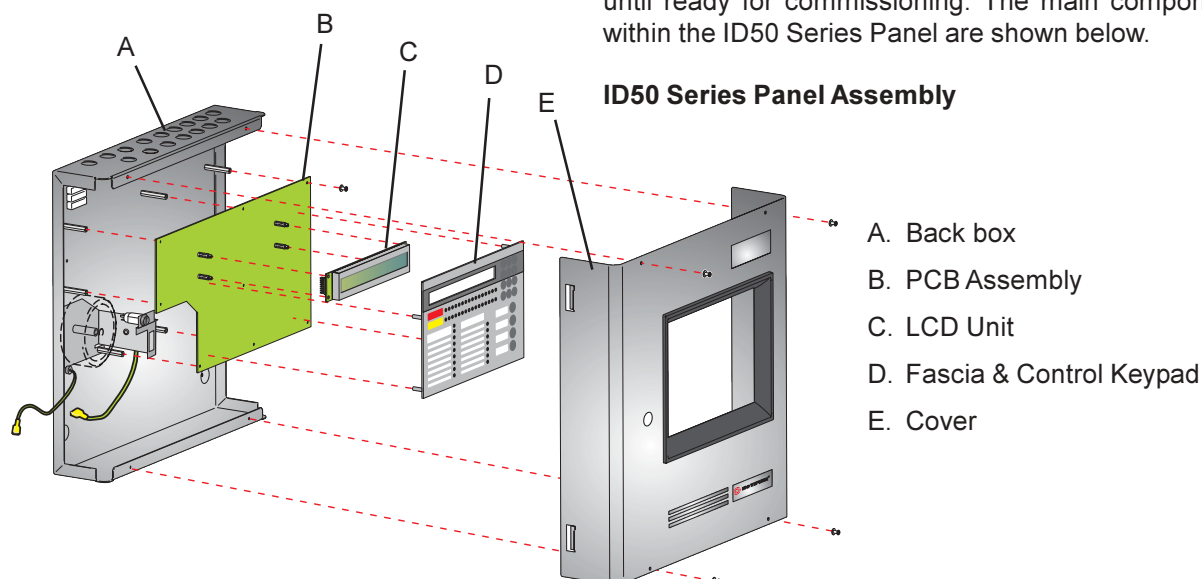
Similarly, if the product is found to be faulty during installation or while in use contact your supplier immediately.
- 2 To aid your supplier and the manufacturer, you are requested to:
 - a. Quote the manufacturer's unique batch reference number which can be found on the packaging or inside the back box.
 - b. With reference to PCB's, quote the part number and revision level which can be found along one edge of the PCB - refer to the applicable section of this manual for specific details.
 - c. Note all the details relevant to your complaint, date of receipt, packaging condition, etc. and forward this to your supplier.
- 3 Where the product needs to be returned to your supplier, you are requested to use the original packaging, or **suitable anti-static** equivalent, wherever possible.

2.5 Dismantling the Panel



For installation purposes, it is recommended that the cover is removed from the back box and stored in a safe place until ready for commissioning.

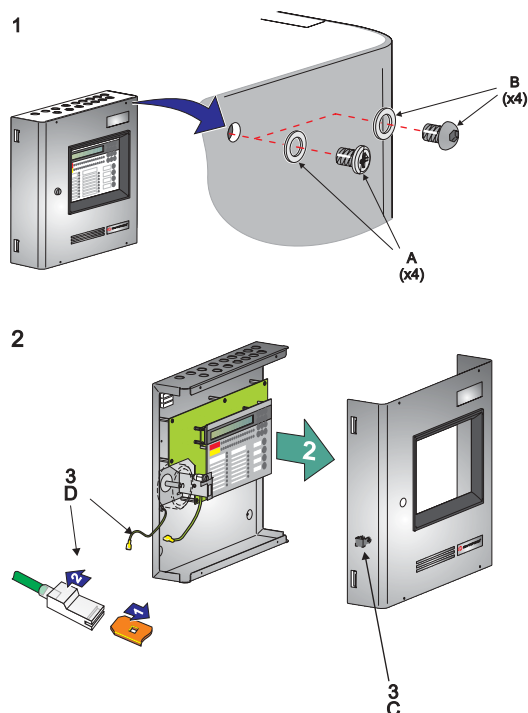
If any other trades, e.g. plasterers or decorators, will be working in the vicinity after fitting the ID50 Series Panel, it is strongly recommended that before re-fitting the cover you remove the panel electronics and store in a safe place until ready for commissioning. The main components within the ID50 Series Panel are shown below.



2.5.1 Removing the Cover



To remove the ID50 Series Panel cover, it is recommended that the following procedure is carried out on a work bench BEFORE siting the panel on the wall:



- 1 Remove the four M3 x 6mm screws and washers (A) using a No. 1 Posidriv screwdriver, or the four hex button-headed screws and clear washers (B) using a 2mm hex key, from the cover, and store safely.
- 2 Carefully withdraw the cover away from the back box, until the earth blade terminal (C) within the cover is accessible.
- 3 Carefully detach the shrouded earth lead spade terminal (D) from the earth blade terminal (C) located in the left-hand inner side wall of the cover.

Note: All blade connections to earth incorporate a locking barb. To make a connection push the shrouded receptacle on to the earth blade (1). To remove this connection, pull the shroud (2), NOT the earth wire.

- 4 Remove and store the cover in a safe place.

Before installing the back box, remove the panel electronics (see **Section 2.5.2, Panel Electronics**).

2.5.2 Removing the Panel Electronics

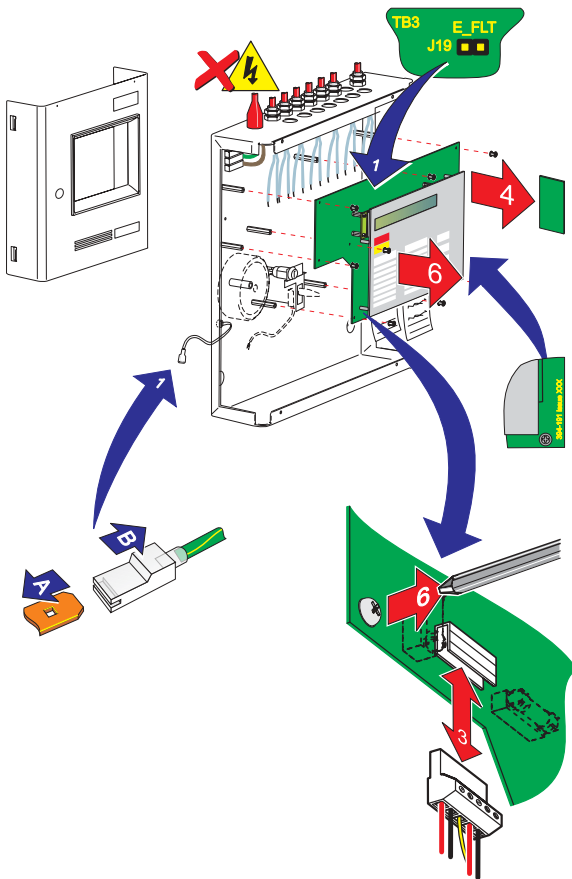
The ID50 Series Panel electronics comprises the PCB assembly with mounted LCD unit and the mounted fascia. These are supplied as one spared item in kit PN: 020-635-XXX. This assembly is located within the back box, but should ONLY be removed when installing the back box or if the PCB requires replacement.



CAUTION: The electronic circuits of the ID50 Series Panel use CMOS devices which can be damaged by static discharge. Suitable precautions **MUST** be taken when handling circuit boards.

Procedure

When installing the back box or, if it becomes necessary to remove the PCB assembly for another reason, follow this recommended procedure:



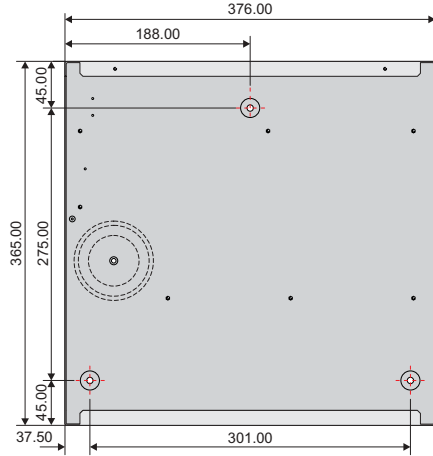
- 1 Remove the cover and store in a safe place, see **Section 2.5.1, Removing the Cover**. Then make a back-up of the current system configuration, remembering to disconnect the link at jumper J19.

Note: The blade connection to the cover fitted in back boxes incorporates a locking bar. To remove this connection, pull the shroud (B), NOT the earth wire, from the earth blade terminal (A).

- 2 Isolate the mains power supply and disconnect the battery interlink wire if fitted.
- 3 At the two-part connector TB1 (on the PCB assembly), using a constant pulling action carefully disconnect the mains and battery power supply wiring.
- 4 Taking **suitable anti-static precautions** remove the RS485 Interface PCB, if fitted (refer to **Section 2.7.1, Installing the RS485 Interface Module PCB**).
- 5 At the PCB assembly, note the polarity and connections of all cables and any jumper configuration settings. Using a screwdriver, loosen all the connector securing screws. Carefully secure all external cable tails away from the electronics and from the back box.
- 6 Using a No. 1 Posidriv screwdriver, remove the eight (8) M3 x 8mm clinch screws from the PCB assembly. Gently lift the PCB assembly clear of the supporting pillars, place it in an anti-static bag and store safely.

Note: If the PCB is to be returned to the manufacturer note its Serial Number and Revision Level (located along one edge).

2.5.3 Back Box Fixing



All dimensions are in millimetres. Fixing hole diameters are 6mm.



DO NOT use the back box as a guide when drilling

The ID50 Series Panels (PN: 002-455-XXX) are 110mm deep (external dimensions including fixing dimples). The back box holds two 12V batteries, up to a maximum rating of 12Ah each.

The back box must be fixed to the wall with screws at three fixing locations (see drawing) using the procedure given below.

The back box **must only** be installed when the panel electronics have been removed (see **Section 2.5.2, Removing the Panel Electronics**).

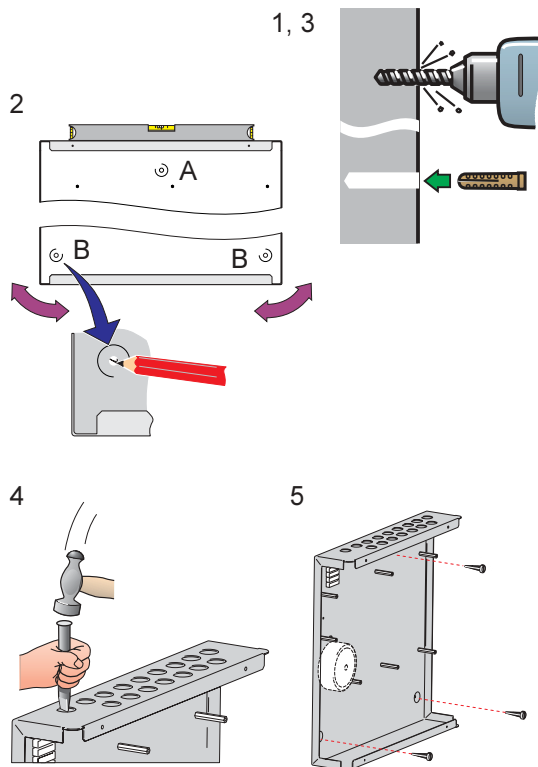
Wall Flatness

To prevent distortion, the back box **MUST** be installed on the wall as flat as possible, i.e. with a maximum flatness deviation between any two points of 3mm. Where the wall is out of tolerance, use appropriate packing pieces when installing the back box to meet the above requirements.

Failure to comply with this requirement will result in the misalignment of the cover's securing screws, which may cause difficulties in fitting the cover.

Procedure

When a suitable location has been found for installing the panel and the panel electronics have been removed, fix the back box to the wall as follows:



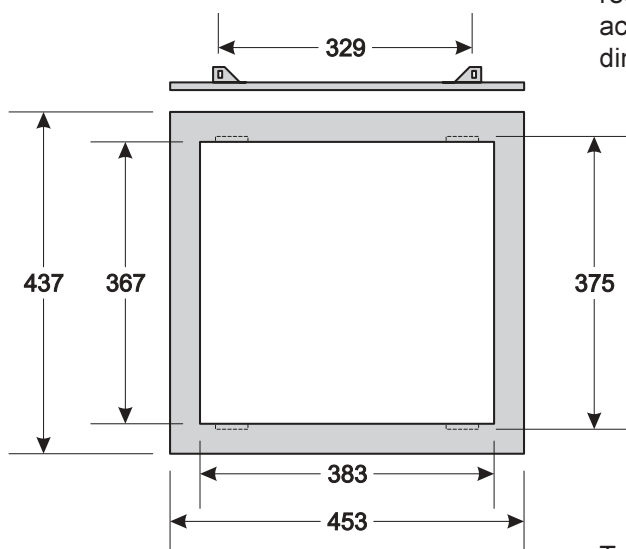
- 1 Using a suitable-sized drilling bit - for holes to take up to 6mm (No. 12-sized) wood screws - drill a hole at position A in the wall. Fit a suitable-sized Rawl-plug, or equivalent.
- 2 Hold the back box in position at hole A (**ensure the panel is level**) and mark the position of the remaining fixing holes (B). Remove the back box and store safely.
- 3 Drill two holes at positions B in the wall, and fit suitable-sized Rawl-plugs, or equivalent.
- 4 Prepare apertures (20mm knockouts) required for cable access.

Note: Make sure paint is scraped from the area surrounding the knockouts, to ensure good earthing for glands.

- 5 Secure the back box to the wall using all three fixing holes and appropriate-sized screws (up to 6mm [No. 12-sized] round or pan-head screws - do **not** use countersunk screws).

2.5.4 Semi-Flush Mounting Bezel (Optional)

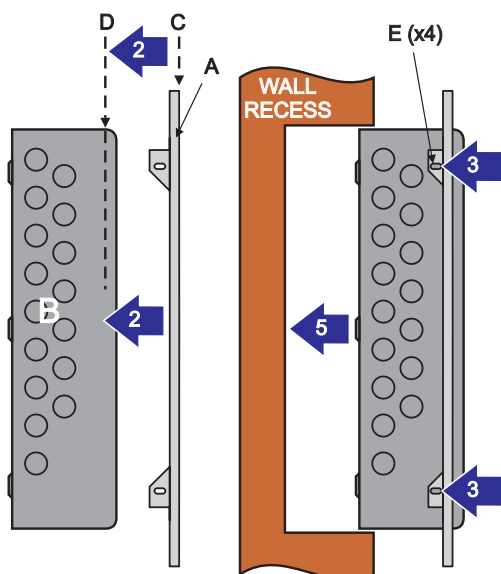
If semi-flush mounting of the ID50 Series Panel is required, a recess 80mm deep and just large enough to accommodate the back box must be cut in the wall (see dimensions below).



All dimensions in millimetres



Before drilling the back box, make sure that no equipment is fitted



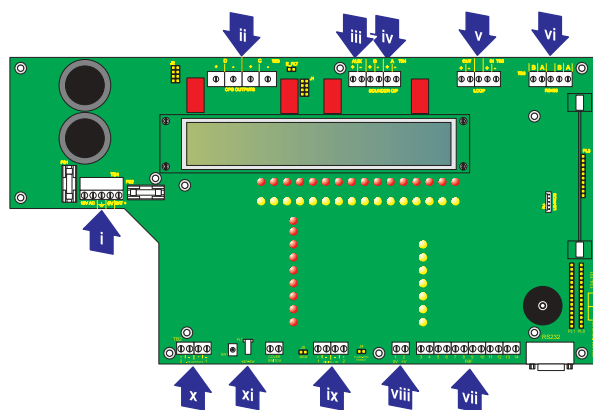
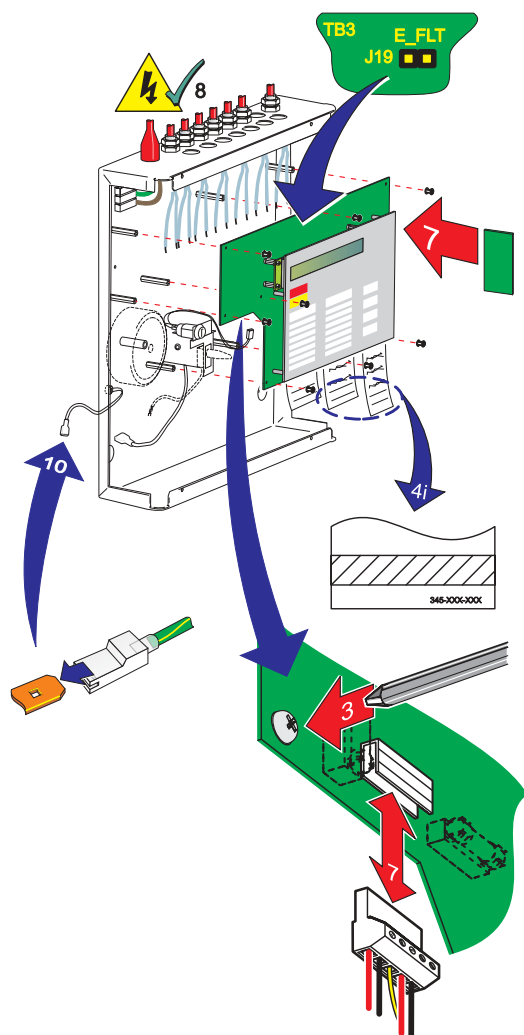
To fit the bezel:

- 1 Before continuing, remove panel electronics and batteries (if fitted) - see **Section 2.5, Dismantling the Panel**.
- 2 Offer the bezel (A), flat sideways towards you, to the front of the back box (B) and position it so the bezel front face (C) is lined up with the rear of the rounded sides of the back box (D).
- 3 With the bezel held in position, use the slotted holes (E) on the bezel as guides and drill four appropriate sized holes to fit M3 screws centrally in the slots. Remove any swarf created.
- 4 Secure the bezel using suitable M3 fixings. Ensure the fixings are accessible from the outside of the back box.

Note: The ID50 Series Panel back box must be fixed to a solid vertical surface, or sub-frame inside the recess, using its rear fixing holes. Do NOT rely on the bezel as a means of fixing.

- 5 Fit back box with attached bezel to the wall recess and assemble the panel, see **Section 2.6**.

2.6 Assembling the Panel



With the back box secured to the wall and all external cabling ready for termination, assemble the panel as follows:

- 1 Ensure that all power to the panel is isolated and observe ALL safety and **anti-static precautions** when installing the PCB assembly.
- 2 Install all kits that require the removal of the PCB assembly.
- 3 Align the PCB assembly to the supporting pillars and, using a No. 1 Posidriv screwdriver, screw the eight (8) M3 x 8mm SEM screws into position.
- 4 Fit the labels. They may require the application of a low tack adhesive:
 - i Apply low tack adhesive to hatched area indicated.
 - ii Slide each label into position.
 - iii Apply slight pressure to the area along the bottom edge of the fascia to ensure the labels are secure.
- 5 Apply the mains power supply and then connect the batteries. Check the PCB assembly operates correctly and then **isolate all power** to the panel.
- 6 At the PCB assembly:
 - i Noting the cable polarity, connect all cables and secure at the correct termination blocks, see **Cables & Wiring**.
 - ii Set all required hardware jumper configurations, refer to the **Section 4 Commissioning**.
- 7 Fit the RS485 Interface Module PCB, if applicable, refer to **Section 2.7.1 Fitting the RS485 Interface Module PCB**.
- 8 Re-apply the mains power supply and then connect the batteries.
- 9 Disconnect the links at the earth fault monitoring jumper E_FLT (J19) and configuration lock MEM (J9). Then connect the RS232 9-way 'D' type Data Transfer Lead (PN 082-173) to the panel at the RS232 connector, PL5. Using the Support Tool, transmit the latest system configuration to the panel.
- 10 Remove the lead and fit the links at J9 and J19, then fit the cover.

Note: Connect the earth wire to the inner side wall of the cover at the tag marked with the earth symbol.

Cables & Wiring

- i Power Supply from transformer (TB1),
- ii CFG Outputs D and C (TB3),
- iii 24 V Auxiliary Power Supply (TB4),
- iv Sonder Outputs B and A (TB4),
- v Loop Cable Output (TB5),
- vi RS485 Communications Cable (TB6),
- vii FBF Communications Cable (VdS Only) (TB9),
- viii FBF Power Supply (VdS Only) (TB8),
- ix Digital / ÜE Cable (TB8), and
- x -VE Outputs (TB2),
- xi Keyswitch.

2.7 RS485 Communications Link

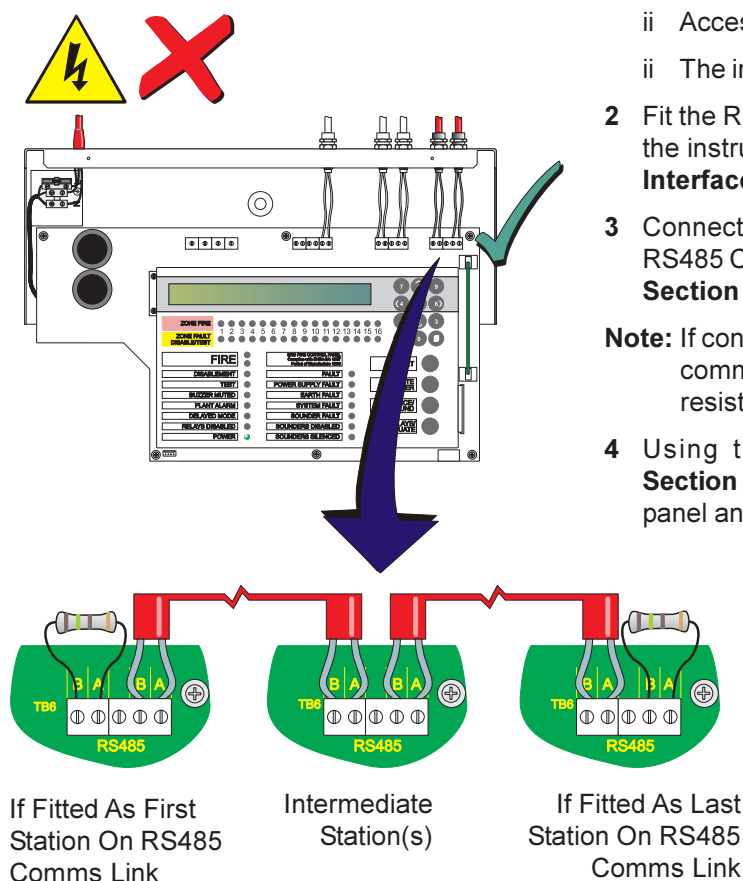


The panel is capable of communicating with a maximum of sixteen (16) repeaters (active IDR-2A or passive IDR-2P) or mimic panels (IDR-M) (for further details concerning the repeaters refer to **997-411, IDR-2A, -2P & -6A Repeater User Manual** or **997-412, IDR Mimic Installation and Commissioning Manual**). The panel is connected to the repeaters in a 'daisy-chain' arrangement via the RS485 Communications terminal block, TB6, on the PCB assembly. The panel must be fitted with the RS485 Interface Module PCB at connector PL3 on the PCB assembly (see **Section 2.7.1, Fitting the RS485 Interface Module PCB**).

The two end stations require a termination resistor to be fitted as illustrated below.

To connect a panel to an RS485 communications link:

- 1 Ensure the following:
 - i All power to the panel is isolated.
 - ii Access to the panel electronics is possible.
 - iii The interlink wire is disconnected at the batteries.
 - 2 Fit the RS485 Interface Module PCB as described in the instructions in **Section 2.7.1, Fitting the RS485 Interface Module PCB**.
 - 3 Connect the RS485 communications cable to the RS485 Communications terminal block, TB6, refer to **Section 4.4.2, RS485 Communications Link**.
- Note:** If connecting the panel at either end of the RS485 communications link, connect a 150R termination resistor (supplied separately) as shown below.
- 4 Using the configuration procedure - refer to **Section 5.5.15, Number of Repeaters**, configure the panel and RS485 communications link.



2.7.1 Fitting the RS485 Interface Module PCB



With the back box fitted to the wall, install the RS485 Interface Module PCB as described below (ensure suitable **anti-static** precautions are taken):

- 1 Remove the cover (see **Section 2.5.1**) to expose the panel electronics. Disconnect the battery interlink wire from the batteries and isolate the mains supply.
- 2 Carefully fit the two plastic PCB support pillars (A) in to the holes (B) on the right-hand side of the PCB Assembly (C).
- 3 Fit the RS485 Interface Module PCB (D).

Fitting to PCB Assembly PN: 394-191-001, 002 or 003

- i Make sure the RS485 Interface Module PCB components are facing the membrane and rest the PCB in the PCB Support pillar guides.
- ii Gently ease the RS485 PCB and PCB Support pillars away from the membrane and carefully slide the RS485 PCB down the pillars until the 10-way socket (E) aligns with the connector, PL3 (F) on the PCB Assembly. Ensure that the components do NOT foul on the membrane.
- iii Carefully return the PCB Support pillars to their normal position and, with a firm and constant pushing action, connect the PCB.

Fitting to PCB Assembly PN: 394-191 Issue 4 or later

- i Make sure the RS485 Interface Module PCB components are facing away from the membrane and rest the PCB in the PCB Support pillars' guides.
- ii Carefully slide the PCB along the pillars until the 10-way socket (E) aligns with the connector, PL3 (F) on the PCB Assembly.
- iii With a firm and constant pushing action, connect the RS485 PCB to the PCB Assembly.

- 4 Connect RS485 Communications wiring at TB6 (see left), ensuring correct polarity where applicable, and fit the cover.

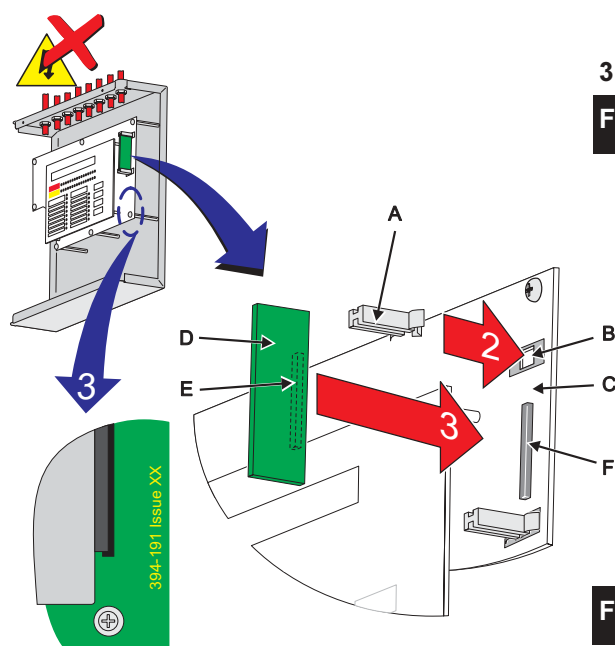
If the panel is the first or last station on the RS485 Communications Link, connect a 150R Termination resistor to the PCB Assembly on the left-hand side or the right-hand side terminals of TB6 respectively.

- 5 Apply the mains power supply and connect the battery interlink wire. Configure the panel, refer to Section 5.

Removing the RS485 Interface Module PCB

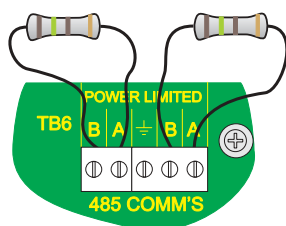
If removing the RS485 Interface Module PCB, follow the procedures above in reverse order.

Ensure a back-up of the current configuration has been made and all power is isolated.



When fitted as first station on RS485 Communications Link

When fitted as last station on RS485 Communications Link



Apply power BEFORE making any RS485 connections!

2.8 RS232 Interface Connections

The panel is fitted with a standard 9-way 'D'-type RS232 Interface connector, located at the bottom right-hand corner of the PCB assembly. The RS232 connector is used for the following purposes:

- Configuration using the PC Support Tool (refer to **997-405, ID50 Series Panel - Offline Configuration Manual**).
- Upgrading the Panel Software (refer to **997-415, ID50 Series Panel - Upgrading Instructions**).

Before starting any of the above operations ensure suitable anti-static precautions have been taken.

The RS232 connector has the following pin out:

Pin	Description
1	Data Carrier Detect (DCD)
2	Receive (RX) Data *
3	Transmit (TX) Data *
4	Data Terminal Ready (DTR)
5	GND *
6	Data Set Ready (DSR)
7	Request To Send (RTS)
8	Clear To Send (CTS)
9	Not Applicable

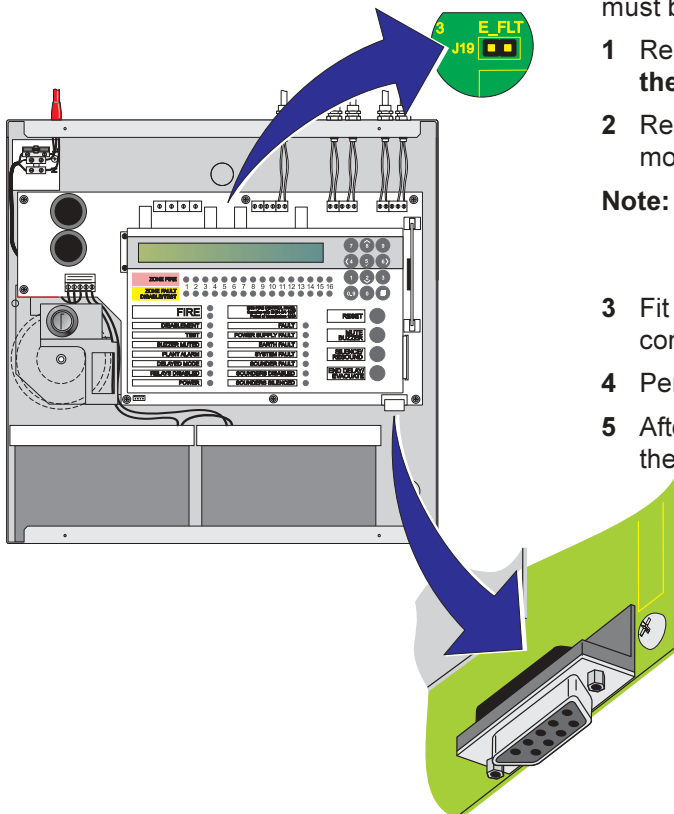
Note: Pin numbers marked thus '*' are the only required connections. Any others fitted will be ignored.

A Data Transfer Lead (PN: 082-173) is required. Jumpers must be removed as follows:

- Remove the cover (refer to **Section 2.5.1, Removing the cover**) to access the panel electronics.
- Remove the Jumper Links J19, E_FLT (earth fault monitoring) and J9, MEM (configuration lock).

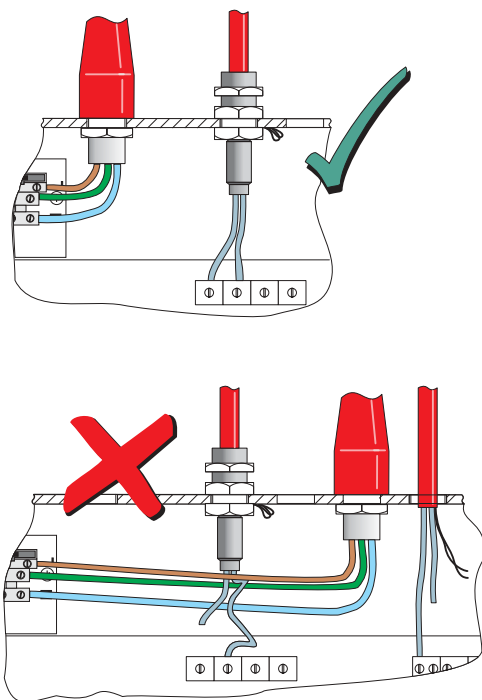
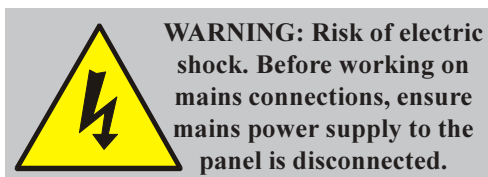
Note: Refer to **Section 4.3.1 Jumper Link Options/ Earth Fault Monitoring (J19)** when connecting third-party equipment to the panel.

- Fit the Data Transfer Lead to the RS232 Interface connector, PL5.
- Perform required operation.
- After satisfactory completion disconnect the lead and then fit the jumpers.



3 Cabling

3.1 Cabling Instructions



All wiring should comply with current IEE wiring regulations (BS7671) or the applicable local wiring regulations. Note also the requirements of EN54-14 for cabling and interconnection of a fire detection and alarm system.

For information on wiring inputs and outputs refer to the appropriate module cable and wiring instructions to identify terminals. Refer also to **Commissioning, Section 4.4 External Wiring Checks** for details.

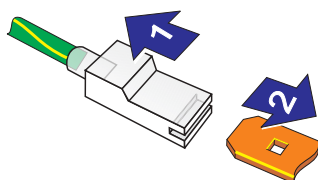
Use the following rules when installing cables:

- 1 Cables should be brought into the cabinet through the 20mm knockouts provided on the top face of the back box. Ensure that all openings in the back box are closed before connecting power to the panel. For example, if more knockouts than required have been removed, then block the holes with blanking glands. This is to prevent access to hazardous voltages.
- 2 Tails should be of sufficient length to connect to the appropriate termination points at the commissioning stage.
- 3 Cables should be screened and should be terminated in appropriate glands to meet local wiring codes and to preserve the integrity of the screen connection. The cable screen is to be clamped inside the cable gland, which must be fitted to ensure a 360° bond is formed with the metal of the back box.
- 4 The supply to the panel must be provided with a suitable and readily accessible double-pole mains disconnect device. The mains supply must be suitably fused and rated according to the specifications (see **Appendix 1, Specifications**).
- 5 The knockout on the extreme left-hand side should be used for mains cable entry. DO NOT bring mains cables in through any other knockout holes and ensure that the mains wiring is always separated from the low voltage wiring. Tails of mains cables should be provided with suitable additional sleeving before connecting to the mains terminal block.
- 6 All low voltage cables should have a minimum 300Vac rating.

General cable installation notes are given in **Section 3.2, Cable Installation Notes**.

Earth Blade Connections

Note: All blade connections to earth incorporate a locking barb. To remove this connection, pull the shroud (1), NOT the earth wire from the earth blade terminal (2).

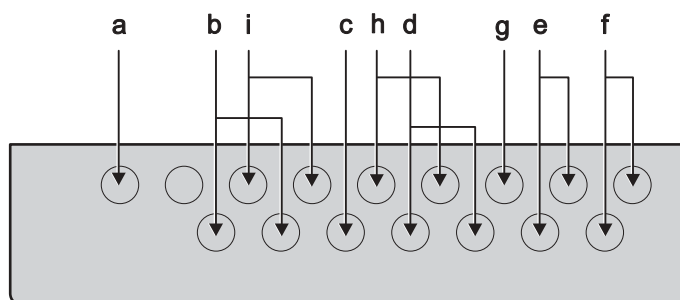


3.1.1 Cable Terminations

This section provides guidance on where to bring cables into the back box for ease of termination:

- The mains supply should be brought into the control panel such that the cable path to the mains termination block is kept as short as possible.
- All loop and ancillary cable terminations should be brought into the panel at suitable positions to ensure tails are kept as short as possible.

The drawings below show recommended points of entry so that cabling can meet these requirements.



Knockout/ Termination Point	Cable Type
a	Power supply cable
b	Output D and C cables
c	DC Auxiliary Supply
d	Sounder Output B and A
e	Loop Wiring
f	RS485 Communications
g	FBF Connections (Not Supported)
h	Digital / ÜE (ÜE Not Supported)
i	-VE Outputs

Note: The FBF Signal and Power supply cables (g), and Digital / ÜE (h) port 2 are only valid when the panel is in VdS mode.

For specific PCB cable termination details see **Commissioning**:

Section 4.4.1, Loop Wiring,

Section 4.4.2, RS485 Communications Link,

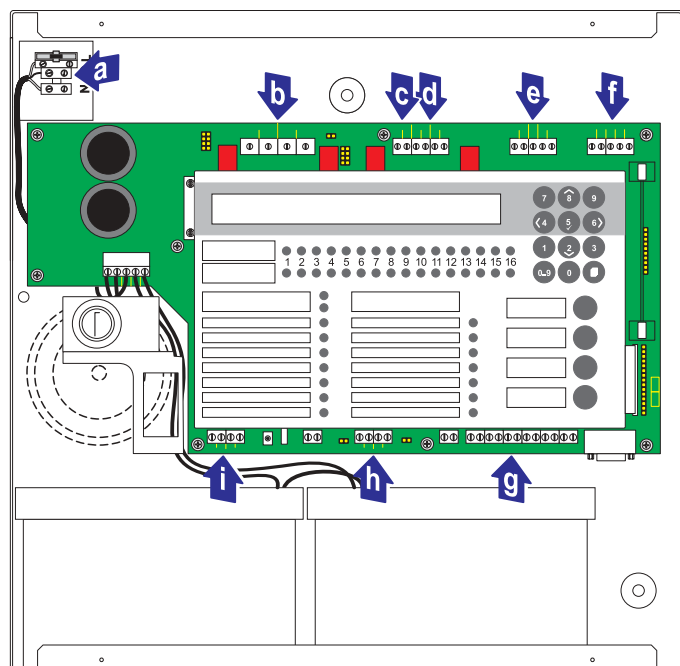
Section 4.4.3, DC Auxiliary Output,

Section 4.4.4, Sounder Circuits Outputs A and B,

Section 4.4.5, CFG Outputs C and D,

Section 4.4.6, -VE Outputs, and

Section 4.4.7, Digital / ÜE Inputs.



3.2 Cabling Installation Notes

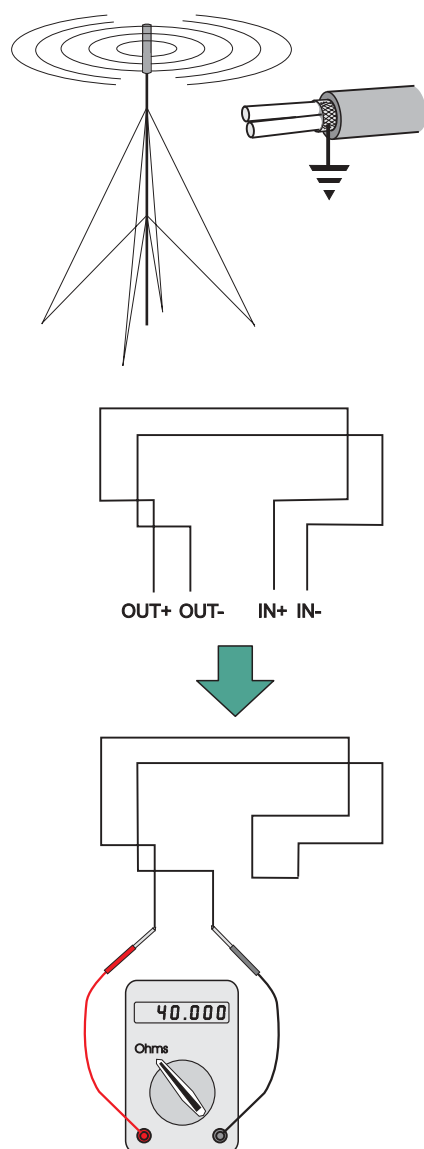
3.2.1 Introduction

The following notes are intended to assist installers of analogue addressable control systems. They have been produced from information derived from the supplier's technical resource and from information fed back concerning existing systems.

3.3.2 Quality of Cable and of Cable Installation

It is vitally important that good quality cable is used, and that correct installation techniques are followed. In general, the following cable installation requirements must be met:

- All cable sections must be circular to allow effective cable clamping using the cable glands.
- The cable must be screened (sheathed) to provide protection against Radio Frequency Interference (RFI) and the screen must be connected to earth at the control panel.
- Multiple earthing of the screen should be avoided. NOTIFIER's field products use insulated mounting bases and back boxes to achieve this. We recommend that this practice be continued if other connections are made. To achieve this with MICC cable may require the use of insulated cable glands at one end of the cable.
- The screen must be continuous throughout the loop.
- The maximum resistance of the loop should not exceed 40 ohms. You may check this by joining the return legs IN+ and IN- together and measuring across the start legs OUT+ to OUT-. Also the cable capacitance should be less than 0.5 μ F. Typically this will allow a maximum loop length of 2000m of screened 1.5mm² cable. Cable recommended for use is MICC with a LSF PVC overcovering, a fire-resilient cable to BS7629 or PVC/SWA/PVC to BS6387.



Recommended Cables:

Cable Type	Manufacturer	Cable Name	Type Number	Application
Foil Screen	Pirelli	FP200	-	All
Foil Screen	Pirelli	FP200 Gold	-	All
Foil Screen	Draka	Firetuf	FTZ 2E1.5	All
Copper Clad	BICC	MICC	CCM2L1.5RG	All
Foil Screen	H & S	Radox	FR Comms	All
Foil Screen	Draka	-	FDZ 1000	Data Comms
Foil Screen	AEI	Firetech	F2C1.5E	Data Comms
7/0.2 mm 4-core, screened	Arrow	-	7-2-4S	External RS232 (e.g. Printer)

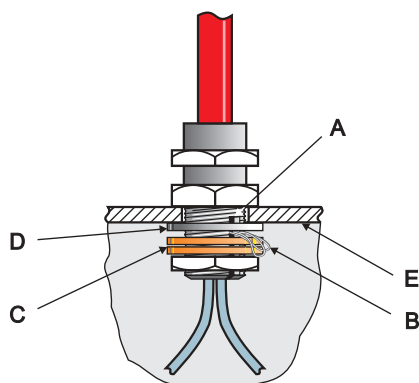
- We recommend that the system should be wired in 2-core cables and each 2-core cable should be specific to one function.
- The RS485 communication cable used should be rated as suitable for up to 200mA in a short circuit condition.

3.3 EMC Considerations

Following the above instructions and by using suitable cables EMC problems will be avoided. In particularly difficult EMC environments, or where non-preferred cabling is used, it is possible to fit additional ferrite suppressors (sleeves) to cables entering the control panel.

3.3.1 Screen Termination

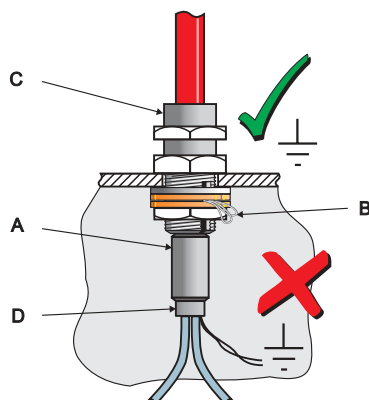
Two methods may be used to terminate the cable screens:



- Use a metal gland with slots (A) that allow the drain wire or screen (B) to be clamped between flat washers (C). Use a steel locking washer (D) between the brass washers and the internal surface of the back box (E). This will provide the best EMC termination. Suitable glands are the CTX range available from CMP UK Ltd. The part chosen should fit the 20mm knockouts.
- Alternatively, an optional earth termination kit (PN: 020-453) is available. This will allow drain wires to be effectively connected to ground. Bare drain wires should be sleeved and dressed to run close to the metal surface of the back box.

3.3.2 Ferrite Sleeves (Optional)

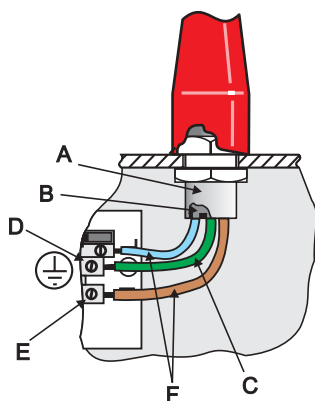
Ferrite sleeves are not normally required with the panel. In difficult EMC environments, or where non-preferred cables are used, optional ferrite sleeves should be fitted to both the loop and sounder wiring. The ferrite sleeves (A) are to be fitted over the conductor(s) of each cable - and NOT over the screen of the cable, which should pass outside of the sleeve. They should be fitted as close as possible to the entry point of the cable, i.e. as near as possible to the screen termination (B) to the metal cable gland (C). The sleeve should be held in place using a cable tie (D).



The ferrite sleeves are available for purchase from NOTIFIER's distributors (PN: 538-143).

3.4 MICC Cables

MICC cables must be fitted with metal cable glands (use Type A2 glands) to ensure good earthing continuity and correct termination. In particular, the mains cable requires that the cable gland (A) is fitted with an earth tail kit (B). The earth tail kit must be connected, using an insulated wire (C), to the panel safety earth connection (D) at the mains termination block (E). The bare mains wiring from the MICC cable must be suitably-insulated (F) and terminated in accordance with the appropriate local wiring regulations.



4 Commissioning

4.1 Introduction

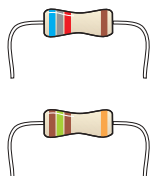
This section describes how to bring the ID50 Series Panel into an operational state (commissioning) ready for configuration. To commission this series of panels follow the steps detailed below. Information on how to configure the panel is given in **Section 5, Configuration**.

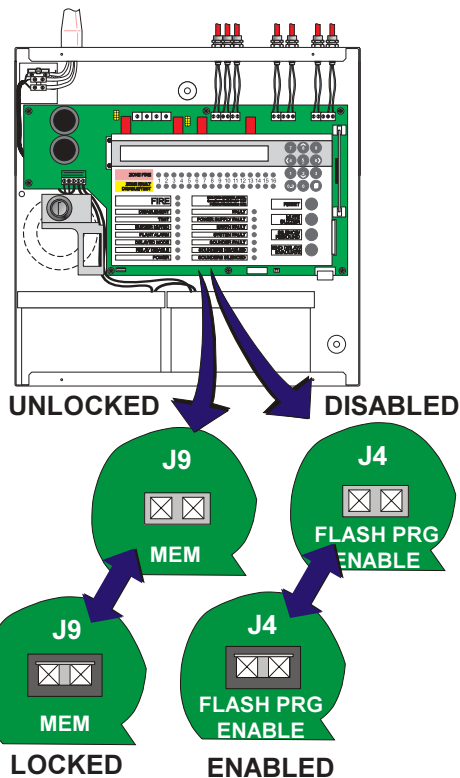
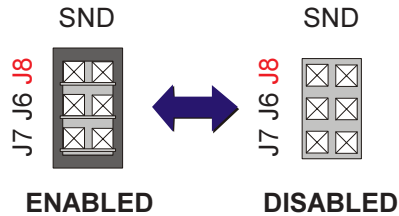
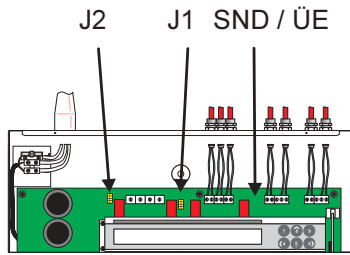
- 1 Check that the panel is installed and assembled correctly, refer to **Section 4.2, Preliminary Checks**.
- 2 Check internal panel configuration, **Section 4.3, Internal Checks**.
- 3 Check and connect the external wiring, refer to **Section 4.4, External Wiring Checks**.
- 4 Configure the panel for the particular system requirements, refer to **Section 5, Configuration**.
- 5 Check that the system is working correctly.

4.2 Preliminary Checks

Before connecting the mains power to the panel, check that:

- a. All PCBs are correctly fitted.
- b. All internal wiring is correctly connected.
- c. The loop wiring and external sounder circuits have NOT, at this stage, been connected to the PCB.
- d. The 6k8 end-of-line resistors are connected to the sounder outputs.
- e. The 150R termination resistors are connected to the first and the last panels on the RS485 Communications Link.





4.3 Internal Checks

When all PCBs have been installed and all cabling has been successfully checked, the appropriate jumper links may need to be configured, as described below.

4.3.1 Jumper Link Options

SND Jumper (J7 / J6 / J8)

The SND Jumper link is the default position for the 6-way link. Removing the link from the SND jumper disables the normal operation of the outputs - **for normal panel operation this link should not be removed**. The jumper is situated to the left of the Loop terminal block (TB5) at the top of the PCB.

ÜE Jumper (J12 / J10 / J11)

Not supported in standard operation.

Software Upgrade (J4)

The Software Upgrade Jumper in conjunction with the Upgrade kit is used to upgrade the panel operating software. To enable the panel upgrade, fit a link to J4 and connect the appropriate cable. The link J4 must be removed on completion of the upgrade (see **997-415, ID50 Series Panel - Upgrading Instructions**). This jumper is situated to the right of the Digital/ÜE terminal block (TB8).

Configuration Lock (J9)

The Configuration Lock Jumper is used to lock and unlock the system configuration. If the link is fitted the system configuration is locked and changes will NOT be allowed. If the link is removed system configuration is possible. The panel can only be configured with the Configuration Lock (J9) in the unlocked position. The jumper is situated to the left of the Digital / ÜE terminal block (TB8).



Earth Fault Monitoring (J19)

Earth fault monitoring should be enabled during normal operation; this is the default condition and is indicated by a fitted jumper link on J19 to the right of the CFG Outputs C and D terminal block (TB3). This is clearly marked on the PCB with 'E_FLT' above the jumper. To disable the earth fault monitoring, remove the link.

The presence of an earth fault is indicated by a yellow Earth Fault and general Fault LED.

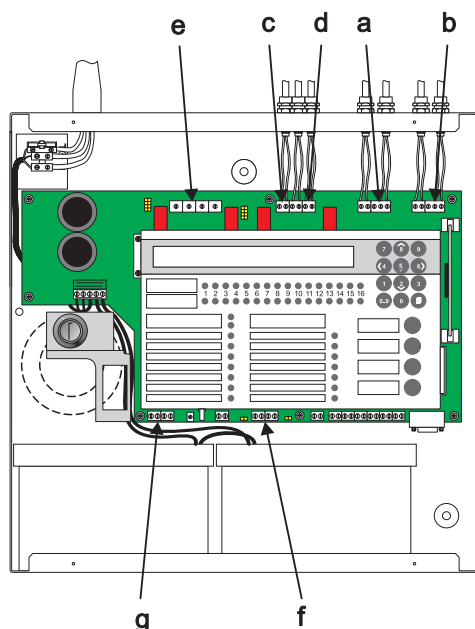
Warning: If an earth fault already exists, DO NOT attempt to connect additional equipment likely to cause earth faults as damage may result, i.e. inhibiting the monitoring will not protect the equipment.

Note: Direct connection of a VDU etc. to the RS232 serial port D-type plug connector PL5, will result in an earth fault and potential damage to the connecting equipment. This fault can be removed by use of an isolated RS232 link or by (temporarily) disabling the earth leakage detection. Wait at least one minute after disabling the earth fault monitoring circuit before plugging into PL5.

4.4 External Wiring Checks

The following sections describe the procedures for checking and connecting the external wiring:

- See **Section 4.4.1, Loop Wiring**,
- See **Section 4.4.2, RS485 Communications Link**,
- See **Section 4.4.3, DC Auxiliary Output**,
- See **Section 4.4.4, Sounder Circuit Outputs A and B**,
- See **Section 4.4.5, CFG Outputs C and D**,
- See **Section 4.4.6, -VE Outputs**, and
- See **Section 4.4.7, Digital / ÜE Inputs**.



4.4.1 Loop Wiring

Typical connections of analogue addressable loop pair to a loop are shown below.

Note: The total length of the communications loop pair cannot exceed 1200 metres using 1.5mm² cable.



The loop wiring **MUST** be disconnected from the panel during this procedure

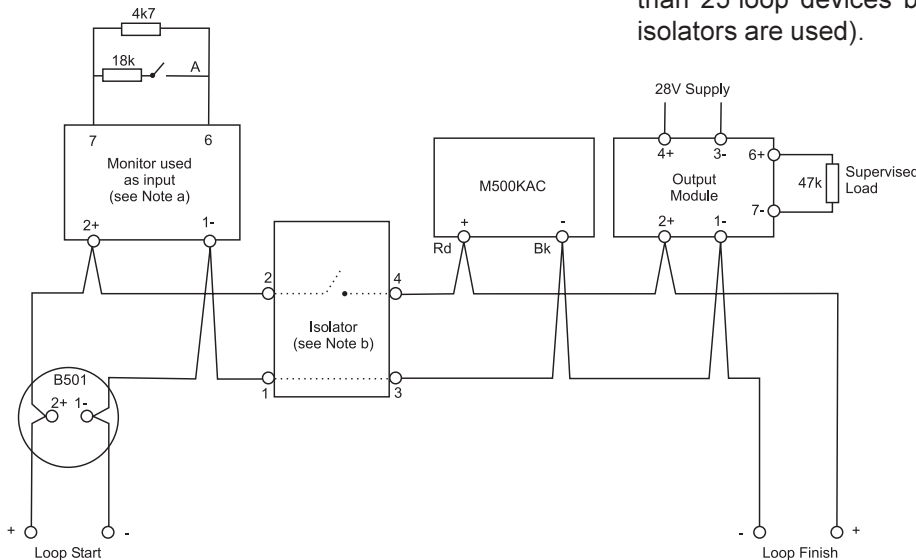
Checks Before Connection

To check the Loop wiring:

- 1 Link out any isolators on the Loop by temporarily shorting terminals 2 and 4 on each isolator. The following tests should then be carried out using a low-voltage multimeter.
- 2 Check the continuity of each leg of the loop and measure the end-to-end resistance. Verify that the total loop resistance (sum of both legs) is less than 40 ohms.
- 3 Connect the meter in 'normal' polarity (+ve to loop +ve and -ve to loop -ve). The meter should initially read low resistance but this should increase as the capacitor in each of the loop devices charges. If the meter indicates the presence of a forward-biased diode then it is probable that one or more of the loop devices is connected in reversed polarity or the wiring is crossed.
- 4 If reversed device(s) are indicated in step 3, they may be located by successive halving of the loop (if the site layout makes this difficult, the affected section of the loop can be identified from the panel fault messages after the system has been configured and the links in the isolators removed).

Note:

- a. A = Normally open switch - closes under an alarm condition.
- b. To comply with the requirements of EN54, isolators should be fitted between a maximum of 32 loop devices. For the ID50 Series Panel, do not place more than 25 loop devices between isolators (20 if FET isolators are used).



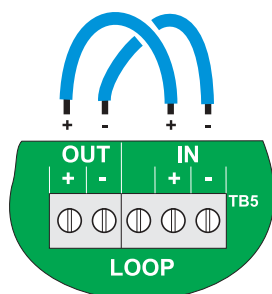
Connecting to the Panel

When the Loop wiring has been checked and found to be satisfactory, do the following:

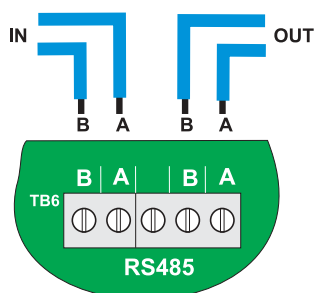
- 1 Remove the temporary links on the isolator units.
- 2 Connect the loop wiring to the panel.

When connecting, observe correct polarity! The ends nominated as + and - must be fitted to the correct terminals.

- 3 When the Loop wiring has been connected, apply the mains supply and then fit the interlink wire to the batteries.
- 4 Check the LCD and LEDs for indications of any faults. If faults exist, correct them and reset the panel.
- 5 Configure the Loop following the procedures in **Section 5.6.1, Signalling Line Circuit (SLC) - Devices** and/or **Section 5.6.2, Signalling Line Circuit (SLC) - Learn**.



Apply power
BEFORE making any
RS485 connections.



4.4.2 RS485 Communications Link

When the RS485 Communications link has been installed in the back box, checked and found to be satisfactory:

- 1 Connect the RS485 Communications Link to the panel at terminal block TB6, located on the PCB assembly, as shown at left.

When connecting, observe correct polarity! The ends nominated as B and A must be fitted to the correct terminals.

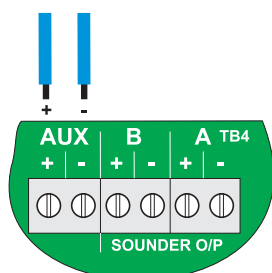
- 2 When the RS485 Communications link has been connected, apply the mains supply and then fit the interlink wire to the batteries.

4.4.3 DC Auxiliary Output

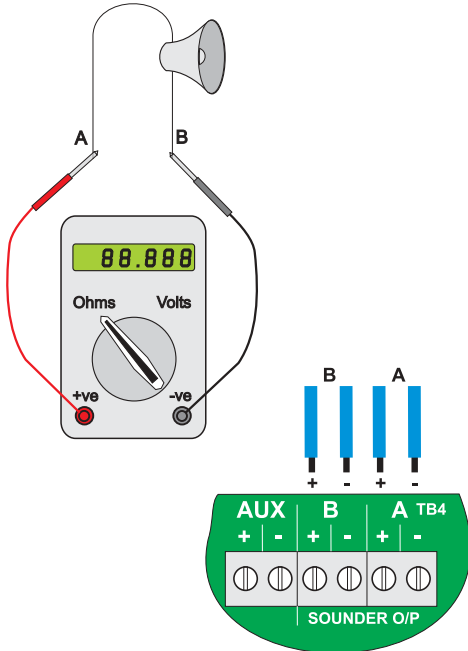
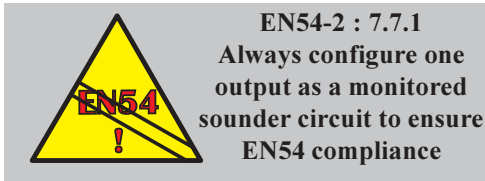
BEFORE connecting any circuit to the monitored DC Auxiliary Output, check that:

- 1 The external wiring is not short circuit.
- 2 There are no forward-biased diodes (as used for example with end-of-line power monitoring relays) connected across the external wiring.

When connecting, observe correct polarity! The ends nominated as + and - must be fitted to the correct terminals.



4.4.4 Sounder Circuit Outputs

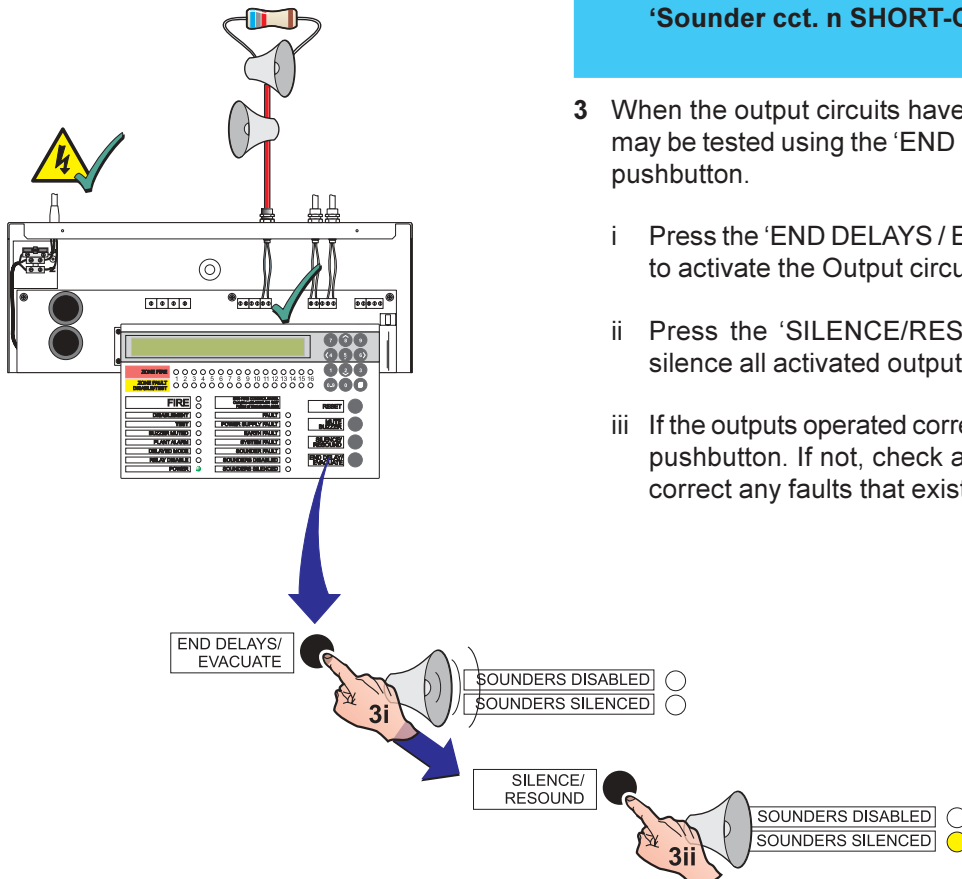


Before the sounder circuits are connected it is recommended that all detection circuits have been checked and that there is no possibility of spurious alarm conditions being generated. The sounders should be polarized and suppressed using IN4002 (or similar) diodes and the circuits should be fitted with 6k8 end-of-line resistors. Perform the following checks:

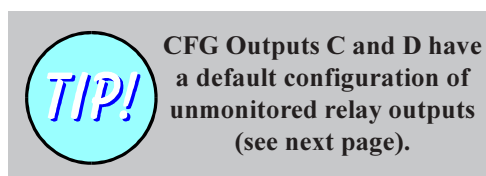
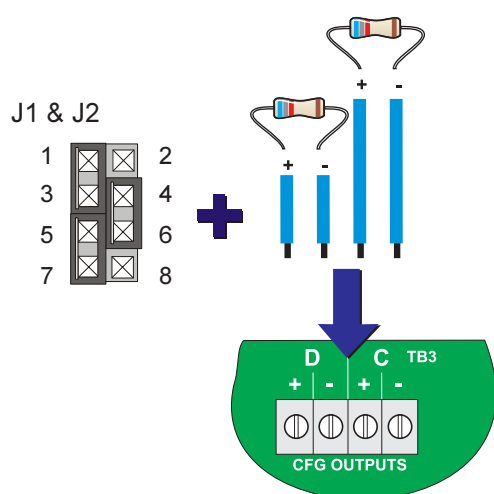
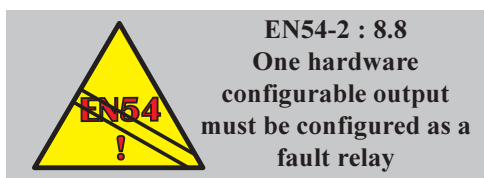
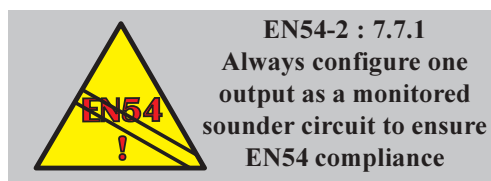
- 1 Use a low-voltage multimeter to check the resistance across each of the sounder circuits:
 - i With the meter connected in reverse polarity (+ve to -ve and -ve to +ve) the reading should be 6k8.
 - ii With the multimeter connected to the circuit in normal polarity (+ve to +ve and -ve to -ve) the meter may indicate a lower value. This is because of the forward-biased diodes in series with the sounders.
- 2 If electronic sounders are used this test will not reveal reversed devices. It is, therefore, recommended that if the circuit resistance appears correct, the following be done:
 - i Remove the 6k8 resistors from the panel outputs.
 - ii Connect the circuit to the panel output while observing correct polarity.
 - iii If there are any reversed devices the panel will then indicate:

'Sounder cct. n SHORT-CCT.'

- 3 When the output circuits have been connected, they may be tested using the 'END DELAYS / EVACUATE' pushbutton.
 - i Press the 'END DELAYS / EVACUATE' pushbutton to activate the Output circuits.
 - ii Press the 'SILENCE/RESOUND' pushbutton to silence all activated output circuits.
 - iii If the outputs operated correctly press the 'RESET' pushbutton. If not, check all possible causes and correct any faults that exist, then repeat Step 3.



4.4.5 CFG Outputs C and D



CFG Outputs C and D can be configured as sounder or relay output circuits using configurable jumper links. Output C is configured using jumper link J1 and Output D is configured using jumper link J2.

The link settings for J1 and J2 are defined in the table below. These changes must only be made with the system powered down and become effective automatically on power-up.

CFG Outputs C and D can be connected as:

- Monitored Sounder Circuits, or
- Un-monitored Relay Outputs

Note: A sounder output can be used to drive an external relay to provide a monitored relay output.

Before connecting CFG Outputs C and D to the PCB assembly, the appropriate hardware links may need to be set.

CFG OUTPUT	Fit Jumper Links Over:	Sounder/Relay	For Unmonitored Normally-Open	For Unmonitored Normally-Closed
Output C (default un-monitored NC)	J1	1 & 3 4 & 6 5 & 7	1 & 2 3 & 5 7 & 8	1 & 2 5 & 6 7 & 8
Output D (default un-monitored NO)	J2	1 & 3 4 & 6 5 & 7	1 & 2 3 & 5 7 & 8	1 & 2 5 & 6 7 & 8

Sounder Circuits

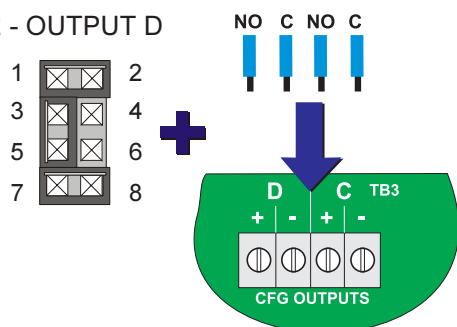
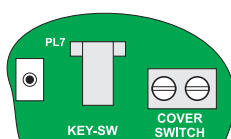
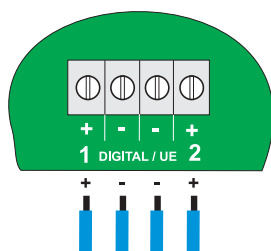
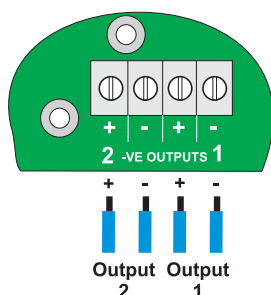
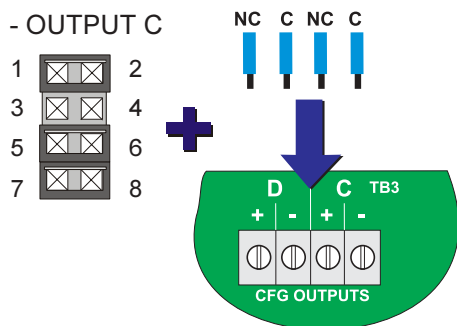
If these connections are to be configured as sounder circuits make sure:

- Jumper Links are set accordingly, refer to **Section 4.3.1, Jumper Link Options**,
- The 6k8 end-of-line resistors are connected correctly to the end of the circuit, and
- Correct polarity is used when terminating at the back box, i.e. terminal 1 being positive and terminal 2 being negative.

Monitored Relay Outputs

If these connections are to be configured to monitor for open and short circuits make sure:

- Jumper Links are set accordingly, refer to **Section 4.3.1, Jumper Link Options**,
- The 6k8 end-of-line resistors are connected correctly to the end of the circuit, and
- Correct polarity is used when terminating at the back box, i.e. terminal 1 is positive and terminal 2 is negative.
- A blocking diode is connected in series with the relay coil.

J2 - OUTPUT D**J1 - OUTPUT C****Unmonitored Relays**

The unmonitored relay Output C is factory set as a fault output, and Output D as a fire output. When configured as volt-free relay outputs, the outputs are NOT power-limited.

If these connections are to be configured as unmonitored relays make sure that:

- Jumper Links are set accordingly, refer to **Section 4.3.1, Jumper Link Options**,
- Correct polarity is used when terminating at the back box, i.e. terminal 1 being normally-open (or normally-closed) and terminal 2 being common contact.

Maintain adequate segregation from power-limited wiring.

4.4.6 -VE Outputs

The two -VE Outputs, located at TB2 at the bottom left-hand corner of the PCB assembly, are normally used to provide a DC power supply for up to two relays located externally to the panel.

When the -VE Outputs are initially connected, the default software outputs are set as follows:

- Output 1 - Pre-Alarm and
- Output 2 - Plant Warning.

During commissioning these outputs can be individually configured to become active if any fire alarm, pre-alarm, fault or plant warning conditions occur (see **Section 5, Configuration**).

4.4.7 Digital / UE Inputs

These inputs are located at the bottom centre of the PCB assembly. Digital Input 1 can be configured for use as either a Day Mode or Class Change function. To select the required function use the 'Digital Input 1' menu, see **Section 5.5.11 Digital Input 1**.

Digital Input 2 is currently not supported.

4.4.8 Switch Connections**KEY-SW**

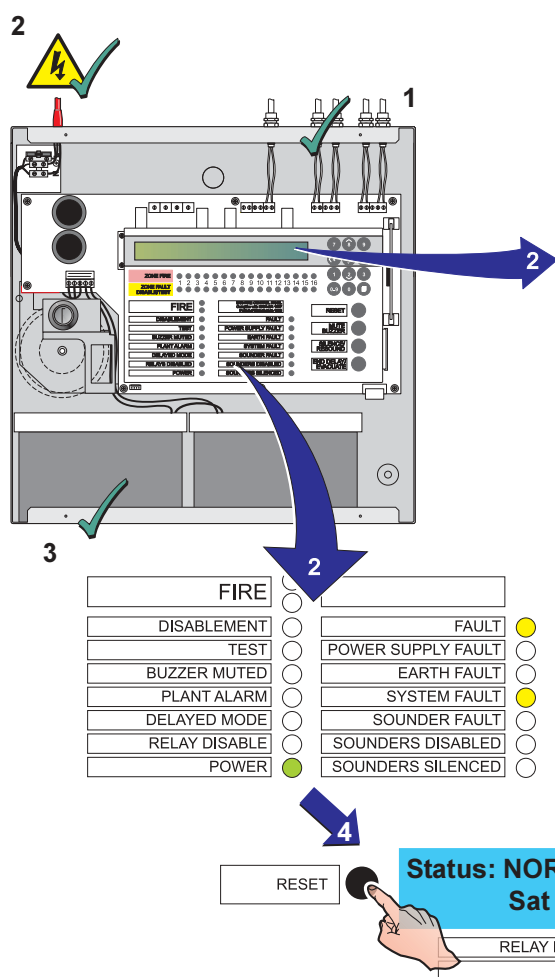
The Key Switch connector is a digital input on the PCB. Operation of the key switch permits access at level 2.

Cover Switch

The input on the PCB lower edge marked COVER SWITCH is used with the optional cover-off switch. Removal of the cover will disable certain functions, depending on the panel configuration.

4.5 Powering the Panel

To power up an ID50 Series panel:



- 1 Ensure all wiring is terminated correctly and all PCBs are fitted correctly.
- 2 With the batteries in the back box, connect the mains/battery supply wiring plug to the power socket, between the mains fuse (FS1) on the left and the battery fuse (FS2) to the right. Turn on the mains supply. The panel will display CPU RESTART with the buzzer sounding, and the FAULT, SYSTEM FAULT and 'POWER' LEDs will illuminate.

FAULT 01/01 00:00
CPU RESTART

- 3 Connect the battery power supply (refer to **Section 4.5.2 Batteries**).
- 4 When powered up, press the RESET button (then enter an appropriate access code if required). The panel should settle to a quiescent state. The LCD should display the 'Status: NORMAL' message unless fault(s) are present on the system.

Note: If the panel indicates fault(s) are present, clear them before you proceed further with the commissioning procedure.

- 5 When all fault LEDs have been extinguished, the panel is ready to test the system, see **Section 4.7, Commissioning Tests**.

4.5.1 Start-up Language Selection

At panel start-up, and with a non-configured memory, you will be prompted to select the appropriate panel language from a displayed screen similar to the one below:

1: English **2: España** **3: Portuges**
4: Islanska **5: Italiano**

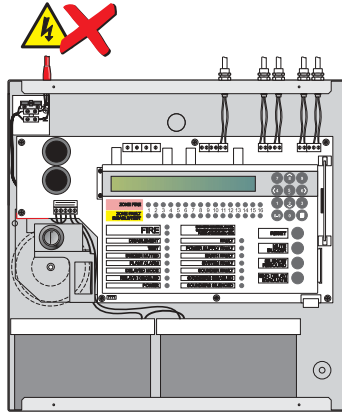
Press the appropriate numeric pushbutton to select the desired language. If a selection is not made within 30 secs the panel will use the first language listed. The list of languages may vary from those listed above.

Note: If the memory is unlocked (refer to **Section 4.3.1 Jumper Link Options**) selection of the desired language will be stored and this language will be used the next time the panel is re-started. If the memory is locked when a language selection is made, the panel will not store this change and the Startup Language screen will be displayed again at the next panel startup. However, the language can be changed at any other time using the 'Language' setup menu (refer to **Section 5.5.1**).

4.5.2 Batteries



**CAUTION-
ENERGY HAZARD!**
**NEVER short the battery
terminals**



The ID50 Series Panel back box holds up to two 12V, 12Ah batteries. the batteries are not supplied with the panel. A valve-regulated, lead-acid type **MUST** be used.

To connect the batteries:

1 Externally isolate the mains supply at the third-party-supplied isolation unit, remove the cover and fit the batteries in the back box. Connect the mains/battery/supply wiring plug to the power socket, between the mains fuse (FS1) on the left and the battery fuse (FS2) to the right.

2 Connect the red wire from the terminal block, TB2 (BAT+) to the positive terminal of battery 2 and the black wire from the terminal block, TB2 (0V) to the negative terminal on battery 1.

Connect one end of the interlink cable to battery 1 positive terminal only.

DO NOT connect both ends of the interlink cable at this stage.

3 Turn on the AC mains supply and verify that after power-up:

- i The panel indicates 'CPU RESTART'.
- ii The buzzer sounds.
- iii The FAULT and SYSTEM FAULT LEDs illuminate.

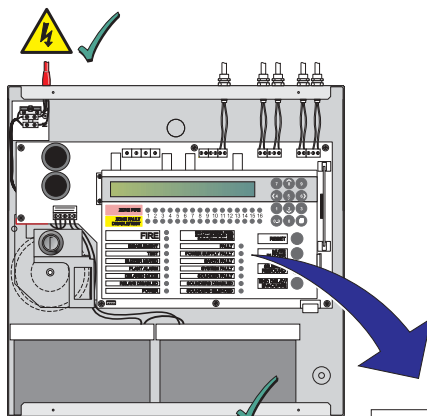
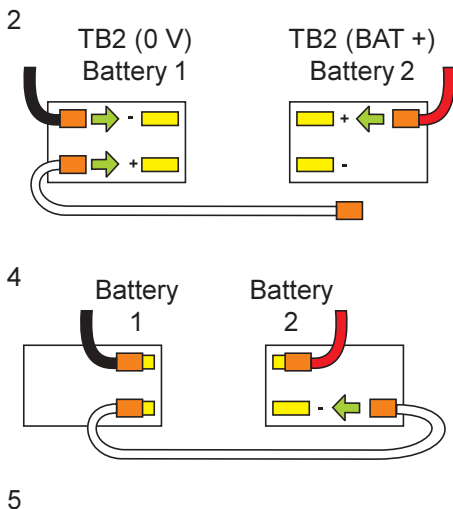
4 Connect the interlink cable to the negative terminal on battery 2.

5 Reset the panel and check that the LCD displays the 'Status: NORMAL' message and that the FAULT and SYSTEM FAULT LEDs extinguish.

Battery Disposal

As a minimum, replace the batteries every four years.

Always dispose of the batteries in accordance with the battery manufacturer's recommendations and local regulations.



RESET

Status: NORMAL

Sat 05/01/2002

00:00

RELAY DISABLE

POWER

4.6 Configuration and Handover

After all external wiring has been connected to the panel and with the LCD displaying the 'Status: NORMAL' message, the panel can be configured for the particular system requirements. Refer to **Section 5, Configuration**.

After configuration has been completed and any faults revealed have been rectified, the system will be ready for commissioning tests (see **Section 4.7, Commissioning Tests**), as required by the appropriate standards, prior to handover to the user.

Panel configuration is performed via the 'Commission' menu:

- 1 When the 'Status: NORMAL' message is displayed, press the '📄' button. The LCD prompts for entry of an access code as displayed below:

ACCESS TO MENUS RESTRICTED
Enter Level 2/3 Passcode: < : BackSp

- 2 Either turn the keyswitch or, using the numeric keypad (see 997-264, ID50 Series Panel - Operating Manual, Section 4.6, Numeric Keys), enter either the:
- Level 2 access code, or
 - Level 3 access code.

Refer to **Appendix 1 - Specifications** for the default passcodes.

If the correct Level 2 access code (User) is entered, the Access Level 2 Menu and a user number (U0 - U9) is displayed in the top left-hand corner of the LCD (this is always U9 if the keyswitch is used):

[U0] 1:Test 2:Disable/Enable 3:Clock
4:View Mode 5:Commission

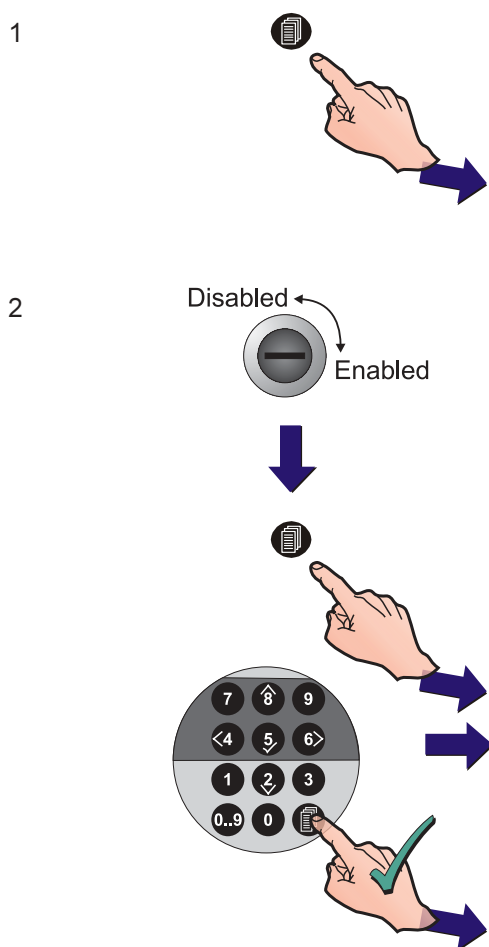
or if the Level 3 access code (Service) is correctly entered, the LCD displays [S1] in the top left-hand corner:

[S1] 1:Test 2:Disable/Enable 3:Clock
4:View Mode 5:Commission

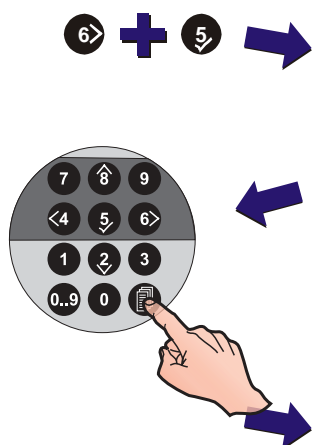
If an incorrect access code is entered, the LCD displays a message:

ERROR - INCORRECT PASSCODE !!!

To return to the normal quiescent state, press the '<4>' button.



- 3 Using the numeric keypad, press '6>' to select the Commissioning option and confirm using the '5↵' pushbutton. The Commissioning option is automatically displayed if a Level 3 passcode was previously entered.



[S1 COMM] 1:Setup 2:Circuit
3:CBE Rules 4:Zones 5:Access ↑ : More

If a Level 2 passcode was entered the LCD prompts:

COMMISSION MODE ACCESS
Enter Level 3 Passcode: < : BackSp

- 4 Enter the correct Level 3 passcode using the numeric keypad and confirm using the '5↵' pushbutton (or press '<4' to cancel the last operation).

[S1 COMM] 1:Setup 2:Circuit
3:CBE Rules 4:Zones 5:Access ↑ : More

4.7 Commissioning Tests

The following paragraphs list tests that should be performed after configuration has been completed. A successful result from these tests indicates that the panel is working properly.

4.7.1 Test LEDs

This procedure is described in the **ID50 Series Panel - Operating Manual, 997-264, Section 4.8.1.**

4.7.2 Test LCD

This procedure is described in the **ID50 Series Panel - Operating Manual, 997-264, Section 4.8.2.**

4.7.3 Test Zones

This procedure is described in the **ID50 Series Panel - Operating Manual, 997-264, Section 4.8.3.**

4.7.4 Test Auto High Test

This procedure is described in the **ID50 Series Panel - Operating Manual, 997-264, Section 4.8.4.**

4.7.5 Test Outputs

This procedure is described in the **ID50 Series Panel - Operating Manual, 997-264, Section 4.8.5.**

4.7.6 Test Buzzer

This procedure is described in the **ID50 Series Panel - Operating Manual, 997-264, Section 4.8.6.**

4.7.7 Test Keyboard

This procedure is described in the **ID50 Series Panel - Operating Manual, 997-264, Section 4.8.7.**

4.8 Sensors and Modules

Each of these devices is packaged with an instruction leaflet showing the correct interconnections for various applications.

4.8.1 EN54 Requirements

Isolators

Isolators must be used on the analogue loop to separate sensors and/or MCPs, including any conventional zone detectors and/or MCPs connected.

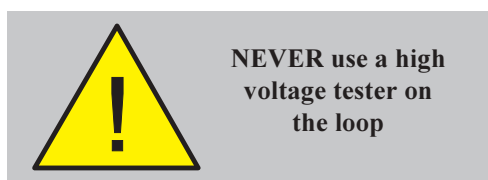
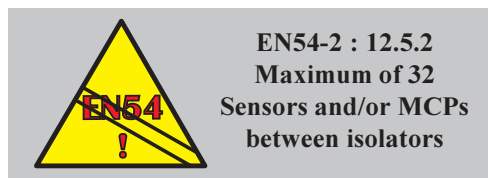
To comply with the requirements of EN54-2, isolators should be fitted between a maximum of 32 loop devices. For this panel, do not place more than 25 loop devices between isolators (20 if FET isolators are used).

Failure to comply contravenes the requirements of EN54-2 in the event of a transmission path fault.

4.8.2 Loop Wiring Testing

Before connecting the panel or devices, the wiring of the loop may be tested for continuity and insulation. Once any components are connected, including isolators, no high-voltage testers such as Meggers may be used on the loop; low-voltage testers such as multimeters may be used.

Note: If isolators are fitted, the +ve conductor of the loop will be open circuit.



5 Configuration

5.1 Introduction

The following sections contain instructions to configure a panel.

For each configuration option, a brief description of its purpose is given, followed by the configuration procedure accompanied by illustrations of appropriate LCD displays.

The panels use menu-driven software which is divided into Level 2 Configuration Options (see **Section 5.3**) and Level 3 Configuration Options (see **Sections 5.4 - 5.11**).

5.2 Navigation and Number Entry

To navigate around the menus and enter numeric values, refer to the **ID50 Series Operating Manual 997-264, Section 4.6**.



5.3 Level 2 Configuration Options

The Level 2 Configuration Options are described in the **ID50 Series Panel Operating Manual 997-264**. The applicable sections are listed below:

- a. Test - **Section 4.8**
- b. Disable/Enable - **Section 4.9**
- c. Clock - **Section 4.10**
- d. View Mode - **Section 4.11**
- e. Commission - **Section 4.12**.

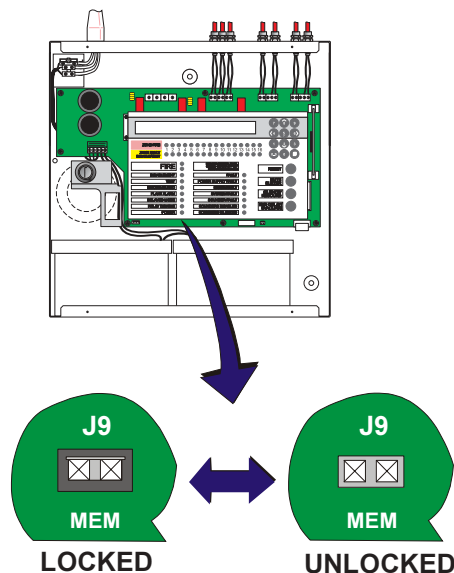
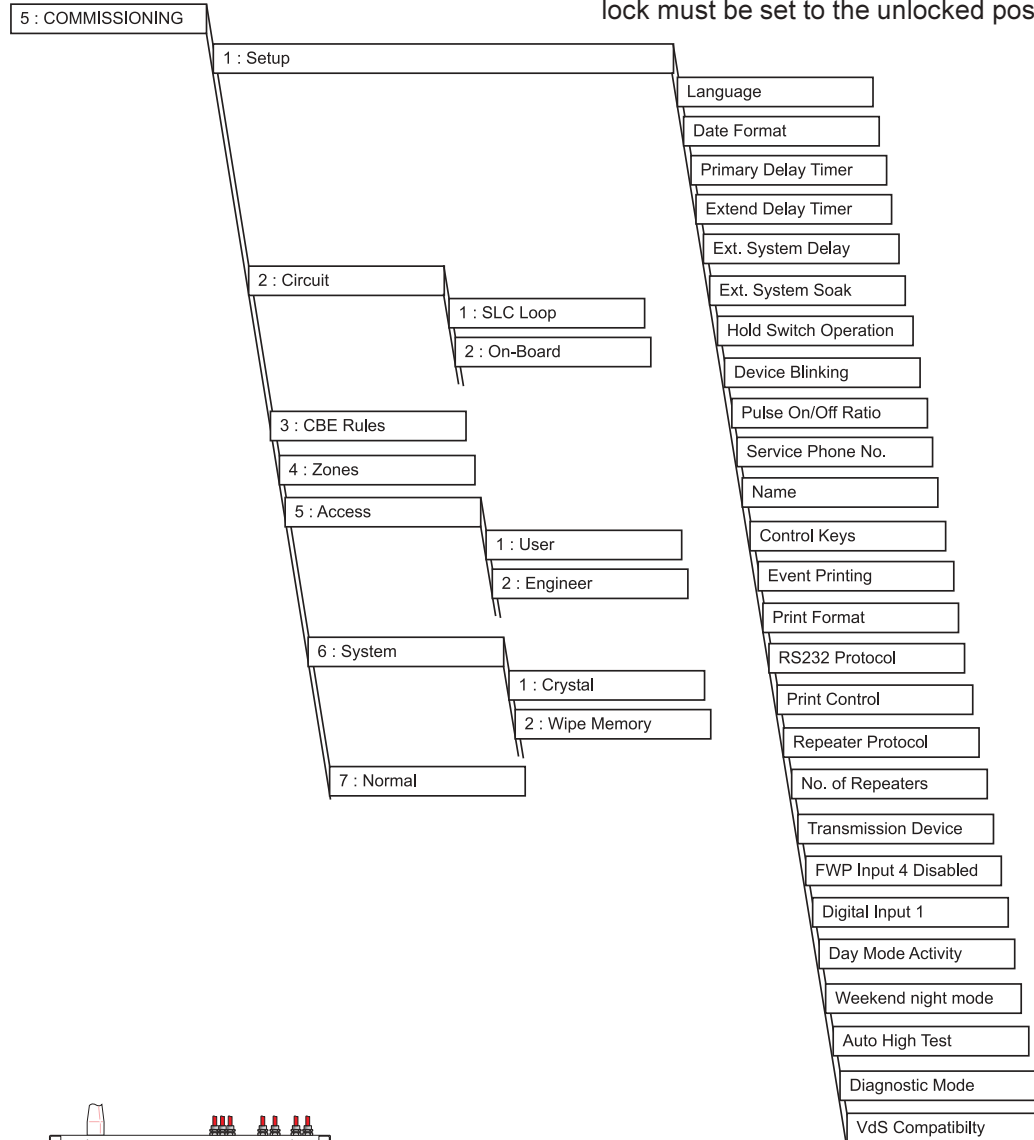
The **Operating Manual** also includes a Level 2 menu map.

For the default Level 2 passcode refer to **Appendix 1 - Specifications**.

5.4 Level 3 Configuration Options

The Level 3 Configuration Options allow you to configure the panel. These Options are listed in the menu map at left. The default Level 3 passcode is given in **Appendix 1 - Specifications**.

Before any configuration changes can be made, the memory lock must be set to the unlocked position (see below).



Memory Lock Jumper Link

Jumper link MEM (J9) locks/unlocks the system configuration. J9 is located to the left of the Digital / UE terminal block (TB8). To configure the panel, J9 must be in the 'unlocked' position (link NOT fitted).

Fit the link to the jumper (J9) before returning to normal operation.

Any attempt to access a configuration menu option while the link is fitted will cause the following message to be briefly displayed:

Memory is Locked!

5.5 Setup Options

The Setup options menu allows the configuration of all panel operation settings.

To display the Setup options menu:

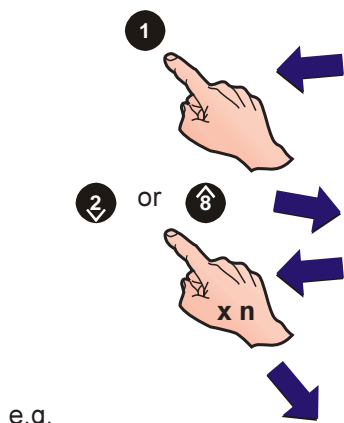
- 1 Using the numeric keypad, press the '1' button at the Commissioning menu.

[S1 COMM]	1 : Setup	2 : Circuit
	3 : CBE Rules	4 : Zones 5 : Access ↑ : More

- 2 The Setup menu comprises a number of options menus. Initially the Language option menu is displayed.

[Setup]	Language =	English
> : Change		↑ : More < : Exit

- 3 To select an alternative Setup option menu, press the '2'/'8' buttons to step through each of the options. Press '4' to return to the Commissioning menu.



e.g.

[Setup]	Date Format = dd/mm/yyyy
> : Change	↑ : More < : Exit

5.5.1 Language

This Setup option is used to select one of the available languages. To select the language:

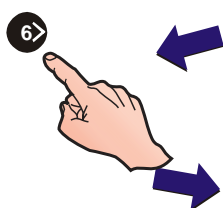
- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup]	Language =	English
> : Change		↑ : More < : Exit

- 2 Press the '6>' button to step through the available languages.

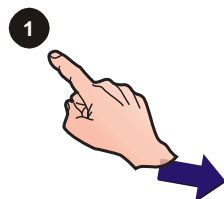
[Setup]	Språk =	Svenska
> : Change		↑ : Mer < : Exit

- 3 Press the '<4' button to return to the Commissioning menu.



5.5.2 Date Format

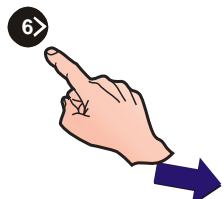
This option is used to select one of three available date formats for display on the LCD. The options available are dd/mm/yyyy, mm/dd/yyyy or yyyy/mm/dd. To change the date format:



- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu. The LCD shows the Language menu.

[Setup] Language = English
> : Change ↑ : More < : Exit

Press the '2'/'8' buttons to scroll through the Setup menu until the Date Format menu is displayed.



- 2 Press the '6' button to step through the alternative Date Format settings.

[Setup] Date Format = mm/dd/yyyy
> : [Setup] Date Format = yyyy/mm/dd
> : [Setup] Date Format = dd/mm/yyyy
> : Change ↑ : More < : Exit

- 3 Press '4' to return to the Commissioning menu.

5.5.3 Primary/Extend Delay Timers

The Primary Delay Timer allows an initial investigation time of up to 300 seconds (default 30 seconds) to be entered or changed. The Extend Delay Timer allows an additional delay (default - 3 minutes) to be entered or changed. The total delay time cannot exceed 10 minutes. To set delay times:

- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup] Language = English
> : Change ↑ : More < : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menus to display the Primary Delay Time menu.

[Setup] Primary Delay Time = 30 Seconds
> : Change ↑ : More < : Cancel

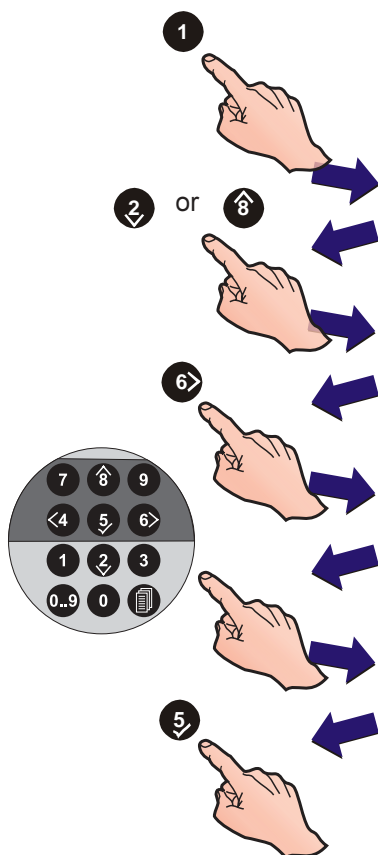
- 3 Press the '6' button. The display then prompts you for the new value:

[Setup] Primary Delay Time = 30 Seconds
Enter new value ____ ✓ : Confirm < : Cancel

- 4 Enter the required delay time using the numeric buttons; (e.g. to set the delay time to the maximum value of 300 seconds, first enter '3', then enter '0', '0').

[Setup] Primary Delay Time = 30 Seconds
Enter new value 300 ✓ : Confirm < : Cancel

- 5 Press the '5' button to confirm and return to the Setup menus.
- 6 Repeat steps 1 to 5 for the Extend Delay Time, using the Extend Delay Time display and a maximum value of 10 minutes.



5.5.4 Extinguishing System Delay

The extinguishing system delay allows an evacuation period of up to 180 seconds to be entered (default 60 secs, minimum of 10 secs). To configure the delay, proceed as follows:

- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

```
[Setup]  Language =      English
> : Change      ↑ : More   < : Exit
```

- 2 Press the '2/8' buttons to step through the Setup menus to display the Ext. System Delay menu.

```
[Setup]  Ext. System Delay =  60 Seconds
> : Change      ↑ : More   < : Exit
```

- 3 Press the '6>' button. The display then prompts you for the new value:

```
[Setup]  Ext. System Delay =  60 Seconds
Enter new value  __  ✓ : Confirm   < : Cancel
```

- 4 Enter the required delay time using the numeric buttons, e.g. 30 secs:

```
[Setup]  Ext. System Delay =  60 Seconds
Enter new value 30  ✓ : Confirm   < : Cancel
```

- 5 Press the '5' button to confirm and return to the Setup menus.

5.5.5 Extinguishing System Soak

To specify for how long the extinguishing system operates for after being turned on:

Note: The timer will only be triggered by CBE rules that have the **Soak Timer Enable** activated.

- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

```
[Setup]  Language =      English
> : Change      ↑ : More   < : Exit
```

- 2 Press the '2/8' buttons to step through the Setup menus to display the Ext. System Soak menu.

```
[Setup]  Ext. System Soak =   0 Seconds
> : Change      ↑ : More   < : Exit
```

- 3 Press the '6>' button. The display then prompts you for the new value:

```
[Setup]  Ext. System Soak =   0 Seconds
Enter new value  __  ✓ : Confirm   < : Cancel
```

- 4 Enter a delay time using the numeric buttons, between 0 and 999 secs, e.g. 90 secs:

```
[Setup]  Ext. System Soak =   0 Seconds
Enter new value 90  ✓ : Confirm   < : Cancel
```

Note: Entering a value of '0' means that the output, after switching ON, is not switched OFF.

- 5 Press the '5' button to confirm and return to the Setup menus.

5.5.6 Hold Switch Operation

AUX modules, configured as one of four Hold Switch categories, can be used to affect the Extinguishing System Delay timer function. The four categories are:

AHJ - While this input is active, the Extinguishing System Delay timer is reset to the configured value **and paused**.

NYC - While this input is active, the Extinguishing System Delay timer is reset to the configured value plus 90 secs and paused.

ULI - While active, the Extinguishing System Delay timer continues to count down but pauses at 10 secs before release.

IRI - Hold switch activity is ignored if two or more zones associated with CBE rules with a category of 'Extinguishing System' are in alarm. Otherwise operation is the same as type ULI.

Note: Only one of the above Hold Switch input types may be used per panel.

- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menus until the LCD shows the Hold Switch Operation menu.

[Setup]	Hold Switch Operation =	AHJ
> : Change	↑ : More	< : Exit

- 3 Press the '6>' button to select alternative settings of NYC, ULI or IRI, as required. Changing the setting saves the change automatically.

Note: The default selection is AHJ.

5.5.7 Device Blinking

The Device Blinking option configures the LED's of sensors and modules on the SLC Loop to blink or not when polled. To configure this option:

- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

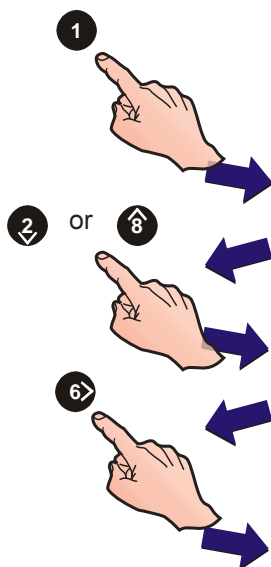
- 2 Press the '2'/'8' buttons to step through the Setup menus until the LCD shows the Device Blinking menu.

[Setup]	Device Blinking = ON
> : Change	↑ : More < : Exit

- 3 Press the '6>' button to select the required setting, either ON or OFF.

[Setup]	Device Blinking = OFF
> : Change	↑ : More < : Exit

- 4 Press '4' to return to the Commissioning menu.



5.5.8 Pulse On/Off Ratio

The Pulse On/Off Ratio option is used to set the sounder output pulse ratio to either 1/1 or 4/1. To configure the ratio:

- 1 From the Commissioning menu, use the numeric keypad and press the '1' button to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menus until the LCD shows the Pulse On/Off Ratio menu.

[Setup]	Pulse On/Off ratio = 1/1
> : Change	↑ : More < : Exit

- 3 Press the '6' button to change the required setting to either 1/1 or 4/1.

[Setup]	Pulse On/Off ratio = 4/1
> : Change	↑ : More < : Exit

- 4 Press '4' to return to the Commissioning menu.

5.5.9 Service Phone Number

This option allows a service contact phone number to be displayed with fault messages. To enter or change the number:

- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menus until the Service Phone Number menu is displayed.

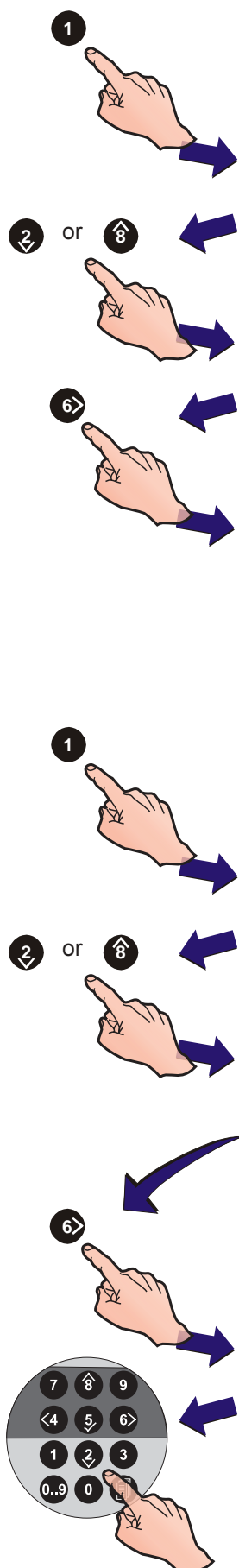
[Setup]	Phone = < blank/existing text >
> : Change	↑ : More < : Exit

- 3 Press the '6' button to enter the text editing menu. The existing 20-characters of text are shown on the upper line. The current cursor position is indicated by a flashing character. Enter the required telephone number via the numeric keypad or use the '2'/'8' buttons to scroll through the available alphanumeric characters.

[↑ : Char	✓ : Done
> : Next	< : Previous	u1:Delete u3:Insert

Note: For further information on how to edit text, refer to **Section 5.8, Zone Texts**.

- 4 Press the '5' button to confirm and return to the Setup menu.



5.5.10 Site Name

The Site Name option allows the entry of up to 20 characters to replace the 'Status: NORMAL' display on the LCD. To edit/change the characters:

- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menus until the LCD displays the Site Name menu.

[Setup]	Name = < blank/existing text >
> : Change	↑ : More < : Exit

- 3 To edit/change the site name, press the '6>' button. The LCD display is replaced by a text editing menu with the existing 20-characters of text on the upper line. The current cursor position is indicated by a flashing character.

Note: For further information on how to edit text, refer to **Section 5.8, Zone Texts**.

[]	↑ : Char	✓ : Done
> : Next	< : Previous	u1:Delete	u3:Insert

- 4 Using the appropriate buttons, edit the text then confirm the new text using the '5' button. The LCD returns to the Site Name menu.

[Setup]	Name = < blank/existing text >
> : Change	↑ : More < : Exit

- 5 Press '4' to return to the Commissioning menu. All changes are saved on exiting.

5.5.11 Control Keys

The Control Keys option allows the access level at which the panel control keys can be operated to be changed. To select the access level:

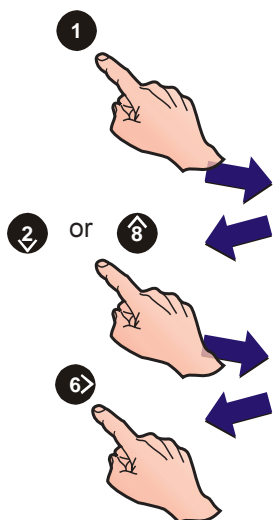
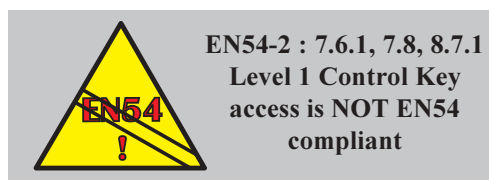
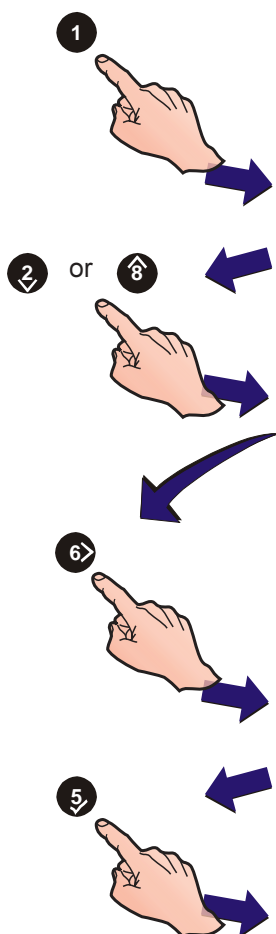
- 1 From the Commissioning menu, using the numeric keypad press the '1' button to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menus until the Control Keys menu is displayed.

[Setup]	Control Keys Access Level = 2
> : Change	↑ : More < : Exit

- 3 Press the '6>' button to change the setting to level 1 (no passcode) or level 2 (user passcode).
- 4 Press '4' to return to the Commissioning menu. All changes will be saved on exiting.



5.5.12 RS232 Protocol

This option enables the protocol of the RS232 port to be configured for use with either driver:

- External printer (default selection).
 - Third party equipment.
- From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup]	Language =	English
> : Change		↑ : More < : Exit

- Press the '2/8' buttons to scroll through the Setup menu until the RS232 Protocol menu is displayed.

[Setup]	RS232 Protocol =	PRINTER
> : Change		↑ : More < : Exit

- Press the '6' button to toggle between 'PRINTER' and 'THIRD PARTY'.
- Press '4' to return to the Commissioning menu.

5.5.13 Print Control or Third Party

This option is dependent upon the selected RS232 operating mode (see **Section 5.5.12**).

If the RS232 port is set to PRINTER, the available 'Print Control' options are:

- BASIC - slow mode, no handshaking (default option).
- XON/XOFF handshaking.

If the RS232 port is set to THIRD PARTY, the available 'Third Party' options are:

- Full duplex (default option).
- Half duplex.

- From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup]	Language =	English
> : Change		↑ : More < : Exit

- Press the '2/8' buttons to scroll through the Setup menu until the Print Control/Third Party menu is displayed.

[Setup]	Print Control =	BASIC
> : Change		↑ : More < : Exit

[Setup]	Third Party =	FULL DUPLEX
> : Change		↑ : More < : Exit

- Press the '6' button to toggle between 'BASIC' and 'XON/XOFF', or 'FULL DUPLEX' and 'HALF DUPLEX'.
- Press '4' to return to the Commissioning menu.

5.5.14 Repeater Protocol

This option is used to select one of two available protocol formats when repeaters are connected to the panel via the RS485 communications link. The options available are:

- a. NOTIFIER
- b. ARP50/RP50.

The NOTIFIER protocol supports the IDR-2A and IDR-2P Repeaters.

There are two additional options:

- c. Third party equipment connection at the RS485 link.
- d. DISABLED, disables communication to any **device** connected to the panel.

To change the Repeater Protocol:

- 1 From the Commissioning menu, press the '1' button on the numeric keypad to enter the Setup menu.

[Setup] Language = English
> : Change ↑ : More < : Exit

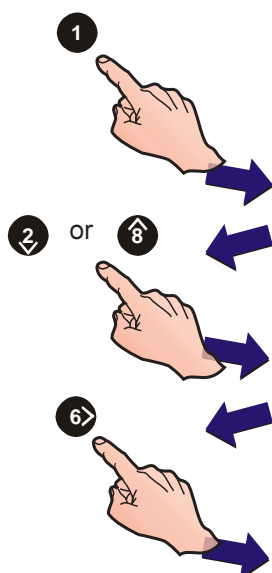
- 2 Press the '2'/'8' buttons to scroll through the Setup menu until the Repeater Protocol menu is displayed.

[Setup] Repeater Protocol = NOTIFIER
> : Change ↑ : More < : Exit

- 3 Press the '6>' button repeatedly to step through the alternative protocol settings.

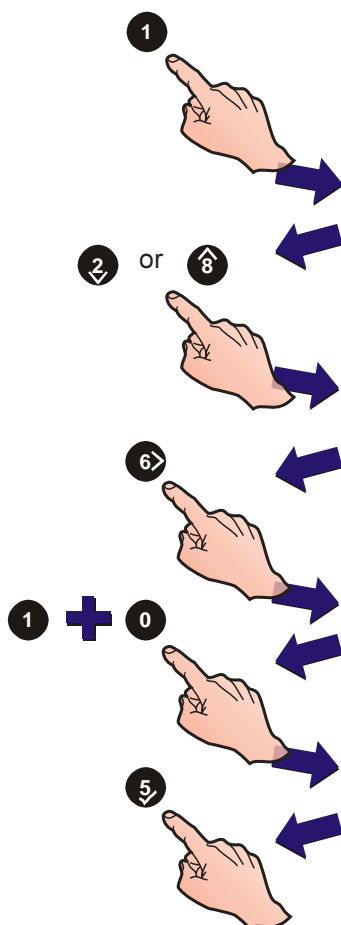
[Setup] Repeater Protocol = NOTIFIER
> : Change ↑ : More < : Exit
[Setup] Repeater Protocol = ARP50/RP50
> : Change ↑ : More < : Exit

- 4 Press '<4' to return to the Commissioning menu.



5.5.15 Number of Repeaters

The Number of Repeaters menu allows the quantity of repeaters connected to the RS485 Communications Link to be entered. The panel displays a fault if this quantity does not equal the number of repeaters connected. To enter the number:



- 1 From the Commissioning menu, press the '**1**' button on the numeric keypad to enter the Setup menu.

[Setup] Language = English
> : Change ↑ : More < : Exit

- 2 Press the '**2**'/**8**' buttons to step through the Setup menu until the Number of Repeaters menu is displayed.

[Setup] No. of Repeaters = 0
> : Change ↑ : More < : Exit

- 3 Press the '**6**' button to enable the number or repeaters to be entered.

[Setup] No. of Repeaters = 0
Enter new value ____ ✓ : Confirm < : Cancel

- 4 Enter the required number using the numeric buttons; for example if entering a value of 10, first press '1', then '0'.

[Setup] No. of Repeaters = 0
Enter new value 10 ✓ : Confirm < : Cancel

- 5 Press the '**5**' button to confirm the setup or press '**4**' repeatedly to cancel and return to the Setup menu.

5.5.16 Transmission Device

The Transmission Device activates in response to an alarm condition. The 'Transmission Device' menu enables the configuration of either a continuous or a 6 second pulse response. This feature is required for VdS-compliant operation only.

5.5.17 FWP Input 4 Disabled

This menu disables either the Extinguishing System or the Sounder Outputs. This feature is required for VdS-compliant operation only.

5.5.18 Digital Input 1

Digital Input 1 can be configured as either Day Mode Start or Class Change function.

When configured as Day Mode Start, activation from the input during the Day Mode period starts/ends Day Mode delays, depending on their current state.

When Class Change is selected outputs assigned to CBE Rules that have Class Change configured will activate when Digital Input 1 is operated.

To configure Digital Input 1:

- 1 Using the numeric keypad, press '1' at the Commissioning menu to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

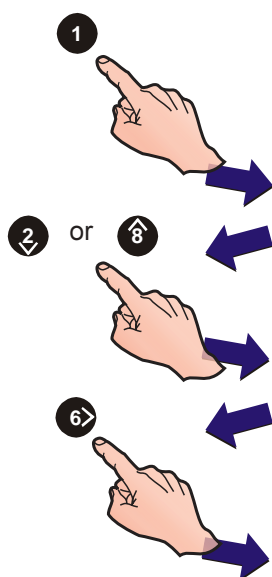
- 2 Press either '2' or '8' to step through the options until the Digital Input 1 menu is displayed.

[Setup]	Digital Input 1 =	Day Mode Start
> : Change	↑ : More	< : Exit

- 3 Press '6>' to toggle between Day Mode Start and Class Change.

[Setup]	Digital Input 1 =	Class Change
> : Change	↑ : More	< : Exit

- 4 With the required configuration of Digital Input 1 displayed, press '<4' to return to the Commissioning menu.



5.5.19 Day Mode Activity

The Day mode function enables the panel to switch between two (2) preset sensitivity levels. Day mode is set for one time period per day for seven days unless the Weekend night mode is also configured (**Section 5.5.20, Weekend night mode**). It also allows the manual activation/deactivation of delayed outputs during the set Day mode period. To configure the Day mode period:

- 1 From the Commissioning menu, using the numeric keypad press the '1' button to enter the Setup menu.

[Setup] Language = English
> : Change ↑ : More < : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menu until the Day mode activity menu is displayed.

[Setup] Day mode activity = DISABLED
> : Change 1 : Disable ↑ : More < : Exit

- 3 Press the '6' button to prompt for a start time at which this function will be enabled.

[Setup] Day mode activity = DISABLED
Enter start time : -0:00 < : Cancel

- 4 Using the numeric keypad, enter the appropriate time in the 24-hour clock format and confirm using the '5' button.

[Setup] Day mode activity = DISABLED
Enter start time : 07:46 < : Cancel

- 5 The LCD displays a prompt to enter an end Day mode time. Use the numeric keypad to enter the appropriate time in the 24-hour clock format and confirm using the '5' button.

[Setup] Day mode activity = DISABLED
Enter finish time : -0:00 < : Cancel

[Setup] Day mode activity = 07:46-> 18:12
> : Change 1 : Disable ↑ : More < : Exit

- 6 Press '4' to save all changes and return to the main Commissioning menu.

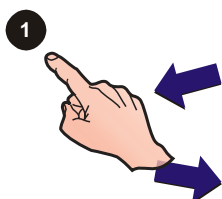
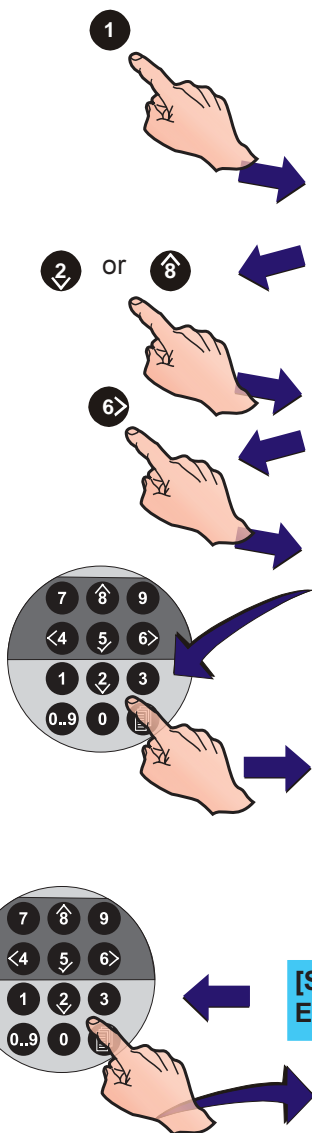
To disable Day mode

- 1 With the Day mode activity menu displayed, press the '1' button on the numeric keypad.

[Setup] Day mode activity = 07:46-> 18:12
> : Change 1 : Disable ↑ : More < : Exit

[Setup] Day mode activity = DISABLED
> : Change 1 : Disable ↑ : More < : Exit

- 2 Press '4' to exit and return to the Commissioning menu.



5.5.20 Weekend Night Mode

If Weekend night mode is enabled, the panel disregards the Day mode period on the two days of the week that coincide with the weekend. To set this mode active:

- 1 From the Commissioning menu, using the numeric keypad press the '1' button to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

- 2 Press the '2/8' buttons to step through the Setup menus until the Weekend night mode menu is displayed.

[Setup]	Weekend night mode =	Disable
> : Change	↑ : More	< : Exit

- 3 Press the '6>' button to toggle this function.

[Setup]	Weekend night mode =	Enable
> : Change	↑ : More	< : Exit

- 4 Press '<4' to exit and return to the Commissioning menu.

5.5.21 Auto High Test

The Auto High Test setup menu configures the panel to test each device on the loop at a specified time. The test checks that each device is able to produce an alarm reading at the panel. To configure the Auto High Test:

- 1 From the Commissioning menu, using the numeric keypad press the '1' button to enter the Setup menu.

[Setup]	Language =	English
> : Change	↑ : More	< : Exit

- 2 Press the '2/8' buttons to step through the Setup menu until the Auto High Test menu is displayed.

[Setup]	Auto High Test =	DISABLED
> : Change	1 : Disable	↑ : More
		< : Exit

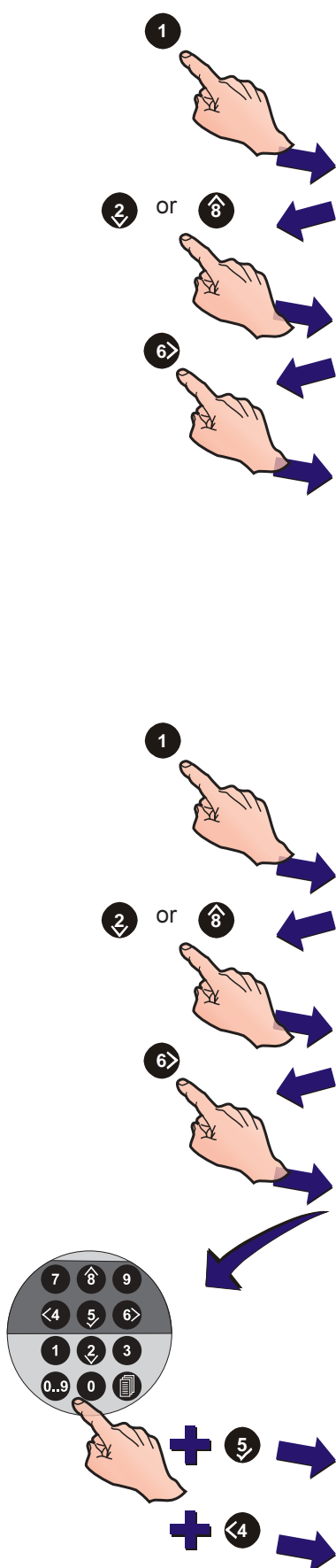
- 3 Press the '6>' button to enter (edit) the time at which Auto High Test will start.

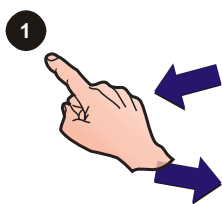
[Setup]	Auto High Test =	DISABLED
Enter start time :	-0:00	< : Cancel

- 4 Using the numeric keypad, enter an appropriate start time in the 24-hour clock format and confirm the set time using the '5' button. The LCD automatically returns to the Auto High Test menu. Alternatively, press '<4' to cancel all changes and return to the Auto High Test menu.

[Setup]	Auto High Test =	07:46
> : Change	1 : Disable	↑ : More
		< : Exit

[Setup]	Auto High Test =	DISABLED
> : Change	1 : Disable	↑ : More
		< : Exit



To disable this function

- 1 To disable Auto High Test, press the '1' button:

[Setup]	Auto High Test = 07:46
> : Change	1 : Disable ↑ : More < : Exit

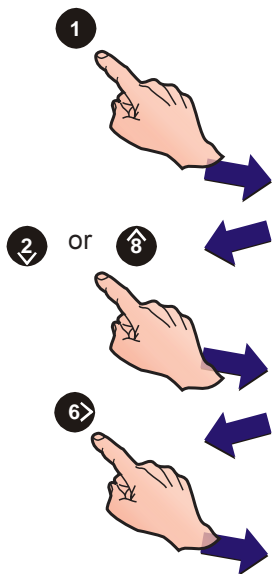
[Setup]	Auto High Test = DISABLED
> : Change	1 : Disable ↑ : More < : Exit

- 2 Press '<4>' to return to the Commissioning menu.

5.5.22 Diagnostic Mode

The Diagnostic Mode option allows extended fault and fire reporting and determines whether events are suppressed until confirmed. To enable Diagnostic Mode:

- 1 From the Commissioning menu, using the numeric keypad press the '1' button to enter the Setup menu.



[Setup]	Language = English
> : Change	↑ : More < : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menus until the Diagnostic Mode menu is displayed.

[Setup]	Diagnostic Mode = ON
> : Change	↑ : More < : Exit

- 3 Press the '6>' button to select the required setting, either ON or OFF.

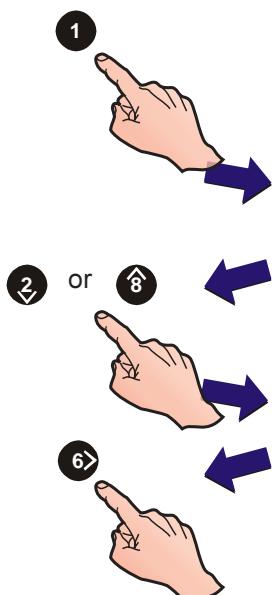
[Setup]	Diagnostic Mode = OFF
> : Change	↑ : More < : Exit

- 4 Press '<4>' to return to the Commissioning menu. All changes will be saved on exiting this menu.

5.5.23 VdS Compatibility

The VdS Compatibility option must be set to 'Disabled'.

- 1 From the Commissioning menu, using the numeric keypad press the '1' button to enter the Setup menu.



[Setup]	Language = English
> : Change	↑ : More < : Exit

- 2 Press the '2'/'8' buttons to step through the Setup menus until the 'VdS Compatibility' menu is displayed.

[Setup]	VdS Compatibility = DISABLED
> : Change	↑ : More < : Exit

- 3 If necessary, press the '6>' button to change VdS Compatibility from 'ENABLED' to 'DISABLED'.

- 4 Press '<4>' to return to the Commissioning menu. All changes will be saved on exiting this menu.

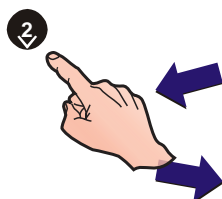
5.6 Circuit Options

The Circuit options menu offers the facility to individually auto-configure, manually learn or view the following circuits:

- Signalling Line Circuit - SLC (loop)
- On-Board Output Circuits - including sounder, control and relay circuits.

To select the Circuit options menu:

- From the Commissioning menu, press the '2' button on the numeric keypad to access the Circuit option menu.



[S1 COMM] 1 : Setup 2 : Circuit
3 : CBE Rules 4 : Zones 5 : Access ↑ : More

- The LCD displays the Circuit options available.

[S1 Circuit] 1 : SLC Loop 2 : On-Board

- Select the number corresponding to the type of circuit that requires changing, i.e. '1' for the SLC Loop, or '2' for On-Board.

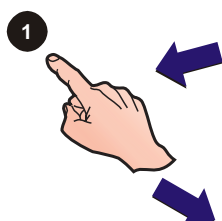
The LCD then displays the appropriate Circuit menu display.

5.6.1 Signalling Line Circuit (SLC) - Devices

This option enables the manual configuration of devices to a pre-configured analogue addressable SLC loop.

To manually learn devices on the SLC loop:

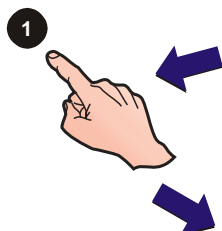
- From the Circuit menu, below, using the numeric keypad press '1' to select the SLC loop configuration.



[S1 Circuit] 1 : SLC Loop 2 : On-Board

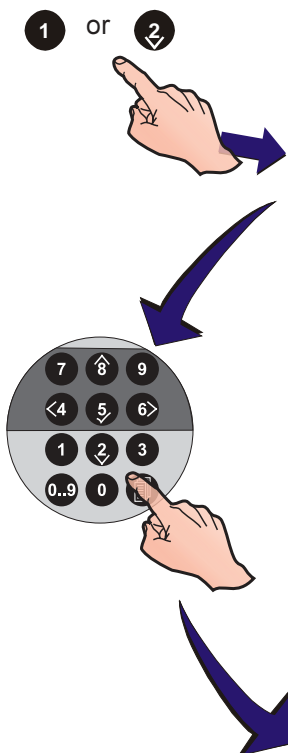
- The LCD displays the Devices and the Learn options. Using the numeric keypad, press '1' to select the Devices menu.

[S1 SLC] 1 : Devices 2 : Learn



- Select a device option by using the numeric keypad and pressing '1' to configure sensors or '2' to configure modules (see **Input Modules** and **Output Modules** overleaf).

[S1 Device] 1 : Sensors 2 : Modules



- 4 At the prompt, using the numeric keypad enter an address number and confirm using the '5' button. When the required device address has been entered, the LCD shows the current settings and the available editing functions.

[Sensor] Enter Address _____

If no device is found at the selected address, the LCD displays one of the messages below:

[Sensor] Snn (xxx) No device learnt

[Module] Mnn (xxx) No device learnt

A specific address can only be configured if:

- A device has previously been auto-learnt at the address, or
- The off-line tool was used to configure the device type present.

Sensors

The following sensor configuration settings are selectable:

- The assigned zone (see **Section 5.6.1.1, Zone Setting**),
- The sensor sensitivity (see **Section 5.6.1.2, Sensor Sensitivity Setting**), and
- The device text string (see **Section 5.8, Zone Texts**).

[Sensor nn - AAA] 1 : Zone (nn)
3 : Sensitivity 4 : [Blank/Existing Text]

Input Modules

The following input module configuration settings are selectable:

- The assigned zone (see **Section 5.6.1.1, Zone Setting**),
- The type of input device (MCP, DKM, MON, ZMX, MNS, MRL, IRL; Extinguishing System inputs: AUX - Hold Switch and Abort Switch (see **Section 5.6.1.3, Type Setting**),

Note: AUX and ZMX device types CANNOT be changed.

- The device text string (see **Section 5.8, Text Editing**).

[Module nn - AAA] 1 : Zone (nn) 2 : Type
4 : [Blank/Existing Text]

Output Modules

The following output module configuration settings are selectable:

- The assigned zone (see **Section 5.6.1.1, Zone Setting**),
- The type of output device (SDR, CTL, RLY, EST, ESO, ESM) (see **Section 5.6.1.3, Type Setting**).

- c. The CBE Rule number. It is NOT possible to change the configuration of the associated CBE Rule.
- d. The device text string (see **Section 5.8, Text Editing**).

[Module nn - AAA] 1 : Zone (nn) 2 : Type
3 : CBE Rule (nn) 4 : [Blank/Existing Text]

5.6.1.1 Zone Setting



The procedure for changing the zone of a module is the same as for a sensor



Fire Inputs can only be assigned to Zones 1 to 16

This option is used during manual configuration to assign a specific device to a specific zone. The option is accessed from the Commissioning Menu.

A maximum of 32 possible zones can be configured, consisting of 16 Fire alarm zones (1 to 16) and 16 secondary zones (17 to 32). The secondary zones are used for AUX plant alarm and warning inputs. Device types SND, RLY, CTL, EST and ESO can be in any zone.

To change the zone of a specified sensor or module, selection of either sensors or modules at the Devices menu is first required. If sensors are selected, the display prompts for zone editing, as follows;

- 1 From the menu displaying the device attributes, press the '1' button on the numeric keypad to access the Zone Setting menu:

[Sensor nn - AAA] 1 : Zone (nn)
3 : Sensitivity 4 : [Blank/Existing Text]

- 2 Using the numeric keypad, enter the required zone number between 1 and 16 and confirm using the '5' button.

[Sensor nn - AAA] 1 : Zone (nn)
Enter New Zone = ____ < : Cancel

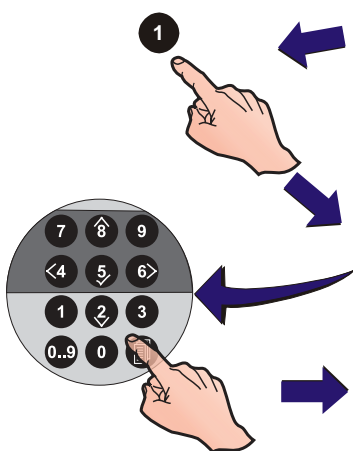
[Sensor nn - AAA] 1 : Zone (nn)
Enter New Zone = 01 < : Cancel

If the entered number is out of the permissible range, the zone number reverts to that previously allocated.

To enter the zone number or press '4' to cancel.

Note: Standard input modules can be assigned to any of the 32 zones. Conventional detector input modules (ZMX) can be assigned to zones 1 to 16 only. When an input module is assigned to a zone in the range 1 to 16, it is given the default type 'MCP' for a Manual Call Point. When an input module is assigned to a zone in the range 17 to 32, it is given the default type 'AUX' for plant alarm input. **Section 5.6.1.3, Type Setting** describes how to select the input type.

Output modules can be assigned to any of the 32 zones for fault reporting. The operation of the output depends on the CBE Rule to which the module is assigned.



5.6.1.2 Sensor Sensitivity Setting

This option allows the sensitivity of sensors to be changed during device configuration. Access is via the Circuit menu. Individual sensor Alarm and/or Day settings can be changed.

Note: The ID60 Panel supports VIEW™. The procedure for changing this sensor's sensitivity is different, see **Appendix 2, ID60 Single Loop Panel Differences**.

During configuration of the sensor sensitivity values, the LCD returns to the previously configured value if any of the following occurs:

- The '**<4**' button on the numeric keypad is pressed.
- The panel state is unchanged for 1 minute.
- A value outside the predefined operating limits (80% to 120%) is entered.

To change the sensor sensitivity settings:

- At the sensor attributes menu, press the '**3**' button on the numeric keypad to display the Sensor Sensitivity Setting menu:

[Sensor nn - AAA]	Sensitivity	
1 : Alarm(100%)	2 : Day(100%)	< : Cancel

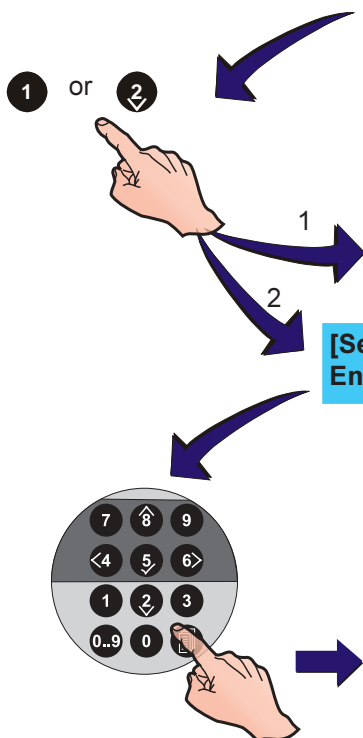
- Using the numeric keypad, press '**1**' to select the Alarm Sensitivity setting or press '**2**' to select the Day Mode Sensitivity setting.

[Sensor nn - AAA]	Sensitivity	
Enter new alarm level : ____		< : Cancel

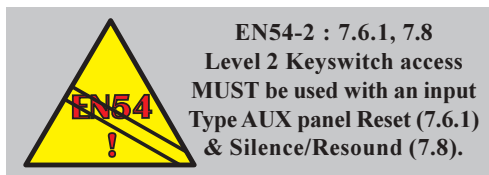
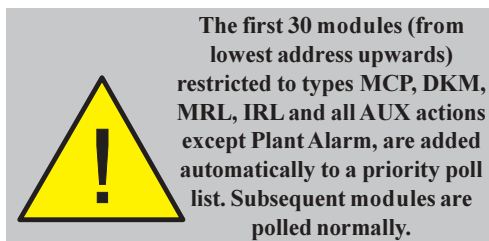
[Sensor nn - AAA]	Sensitivity	
Enter day mode alarm : ____		< : Cancel

- At the appropriate prompt, use the numeric keypad to enter the desired percentage value.
- Press '**5**' to confirm the value entered or press '**<4**' repeatedly to cancel the operation.

[Sensor nn - AAA]	Sensitivity	
1 : Alarm(120%)	2 : Day(80%)	< : Cancel



5.6.1.3 Type Setting



Standard input modules in zones 1 to 16 can be assigned to various types as shown below. A Manual Call Point (MCP) input has the action of a zone fire alarm 'Manual Call Point' with prioritized polling. A Fire Alarm Monitor (MON) input has the action of a zone fire alarm with non-prioritized polling. An input module assigned to a zone in the range 17 to 32 is automatically given the type AUX, for a plant alarm input.

Input devices of type AUX can be programmed for plant alarm, reset panel, silence sounders, mute buzzer, class change, (only used when Class Change input has been configured for Day Mode start), abort switch and hold switch (the last two cases are associated with the configuration of Extinguishing System inputs).

The device type is configured during the learn process. Sensor types and Plant Warning inputs (AUX) cannot be changed. The 'Type' menu option is not shown on the display for these devices.

Monitored output modules can be assigned to various types as shown below.

To change the module type as displayed on the LCD:

- Using the numeric keypad press '2' (Type option) from the menu displaying the module attributes:

[Module nn - MCP] 1 : Zone (nn) 2 : Type
4 : [Blank/Existing Text]

[Module nn - SDR] 1 : Zone (nn) 2 : Type
3 : CBE Rule (nn) 4 : [Blank/Existing Text]

- Selecting the Type option displays one of the following:

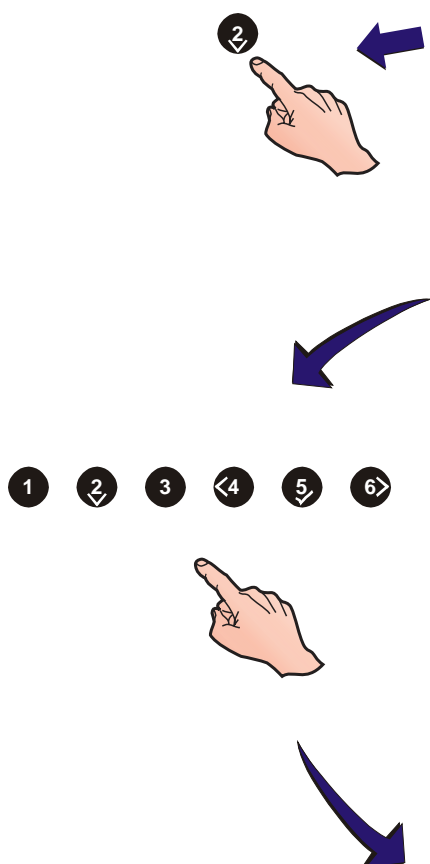
[Module nn - MCP] Select Type :
1:MCP 2:DKM 3:MON 4:MNS 5:MRL 6:IRL <:Cancel

[Module nn - SDR] Select Type :
1:SDR 2:CTL 3:RLY 4:EST 5:ESO 6:ESM <:Cancel

Note: On-Board circuit 1 ONLY supports SDR, CTL and TxD Monitored Output Circuits. On-Board circuit 2 ONLY supports SDR and CTL Monitored Output Circuits. On-Board circuits 3 and 4 support all Monitored and Unmonitored Output Circuits if Jumper Links J1 and J2 have been correctly configured. On-Board circuits 5 and 6 are fixed as Unmonitored Output circuits (RLY).

- Select the module type and using the numeric keypad press the corresponding number, '1', '2', '3', '<4', '5' or '6' to select the new type. The LCD then displays the new module attributes menu. A typical menu is shown below:

[Module nn - MCP] 1 : Zone (nn) 2 : Type
4 : [Blank/Existing Text]





The first 30 modules (from lowest address upwards) restricted to types MCP, DKM, MRL, IRL and all AUX actions except Plant Alarm, are added automatically to a priority poll list. Subsequent modules are polled normally.

5.6.1.4 AUX Action

An input device assigned to zones 17 to 32 is treated as a Plant alarm input and given the default type of AUX. The auxiliary action specifies which of the following actions takes place with the operation of an AUX input:

- i Plant Alarm - non-latching
- ii Panel Reset
- iii Silence Sounders
- iv Mute Buzzer
- v Class Change
- vi Abort Switch - latching
- vii Hold switch - non-latching

To ensure recognition by the panel, the input device must be active for at least 5 seconds (longer if not priority-pollled).

To select the required auxiliary action:

- 1 Using the numeric keypad, press '3' at the module edit screen to select the auxiliary 'Action' option (the default action is PLANT).

**[Module nn - AUX] 1: Zone (17) 2: CBE Rule (nn)
3: Action (PLANT) 4:[Blank/Existing Text]**

- 2 The screen displays action options as follows:

**[Module nn - AUX] 1: Plant Alarm
2: Reset Panel 3: Silence Sounders ↑: More**

Press the '2/8' buttons to display other AUX action options, as appropriate.

**[Module nn - AUX] 4: Mute Buzzer
5: Class Change 6: Abort Switch ↑: More**

**[Module nn - AUX] 7: Hold Switch
↑: More**

- 3 Press the appropriate numeric pushbutton to select the required action, e.g. Abort Switch. The display confirms the selection and returns to the module edit screen:

**[Module nn - AUX] 1: Zone (17) 2: CBE Rule (nn)
3: Action (ABORT) 4:[Blank/Existing Text]**

Press the '<4' button to exit the module edit screen.

5.6.1.5 CBE Rules

The CBE Rules option is used during the SLC Loop configuration. It is accessed through the Commissioning Menu. The panel can be configured with up to 64 CBE rules. This option enables modules to be assigned to a CBE Rule.

Base Rule and Rule Range

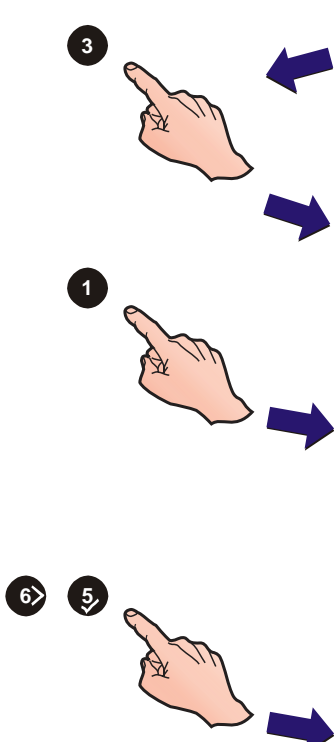
Devices may be activated by any of up to 24 contiguously-numbered CBE rules. When assigning modules to CBE rules a Base Rule number has to be specified with an associated rule range (up to 24 rules starting at the base rule) and the auxiliary action. The Base Rule number and rule range apply to AUX - Hold Switch, AUX - Abort Switch, SND, RLY, CTL, EST, MRL, IRL and ESO.

For input devices the range specifies which CBE rules are affected by the input. The action taken by the CBE rule depends on the type of input.

For outputs, the range specifies which CBE rules will affect the output. The output takes the highest priority status from a combination of all the CBE rules.

The Base Rule number has a valid range of 1-41 with a default of 1. The Rule Range will default to having the first CBE rule set only.

To select or change the Rule number to which a module is assigned:



[Module nn - SDR] 1 : Zone (nn) 2 : Type
3 : CBE Rule (nn) 4 : [Blank/Existing Text]

1 With the module CBE Rules attributes screen displayed, use the numeric keypad and press the '3' button to select the CBE Rules option screen:

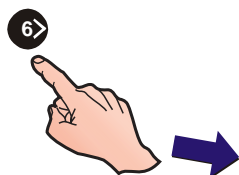
[Mnn] CBE Rules 01_____ 24
1: Base [01: No] NNNNNNNNNNNNNNNNNNNNNNNNNNNNN

2 Using the numeric keypad, press the '1' button to change the CBE Base Rule:

[Mnn] CBE Rules 01_____ 24
Enter CBE Rule: _ < : Cancel

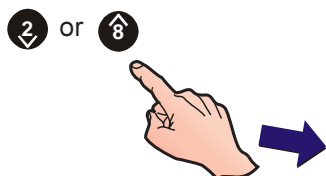
3 Using the numeric keypad enter the desired Base Rule, for example Rule 6, and press '5' to confirm. The CBE Rule range on line 1 changes, now starting at '6'. The CBE Rule number in the square brackets on line 2 also selects the changed selection:

[Mnn] CBE Rules 06_____ 29
1: Base [06: No] NNNNNNNNNNNNNNNNNNNNNNNNNNNNN



- 4 Press the **6>** button to move the cursor to the right - the selected rule number is inverted and is changed in the square brackets on line 2.

[Mnn] CBE Rules 06_____ 29
1: Base [13: No] NNNNNNNNNNNNNNNNNNNNNNNNNNNNN



- 5 At the selected CBE Rule number, press the **2<** / **8^** buttons to toggle its status between **Y(es)** and **N(o)** - the change of status is confirmed in the square brackets on line 2 as follows:

[Mnn] CBE Rules 06_____ 29
1: Base [13: Yes] NNNNNNNNNNNNNNNNNNNNNNNNNNNNN

Continue with other CBE Rules in the same way.

- 6 Press '**5**' to confirm or '**<4**' to cancel the new CBE Rule selection.

Other module types are selected and CBE Rules associated in the same way as illustrated above. Return to the 'Modules' selection screen as described in **Section 5.6.1 Signalling Line Circuit (SLC) - Devices**.

Refer to the configuration menu option for information on how to define the pattern (CBE Rule). The pattern defines whether the output will respond to zonal alarms. It also determines whether the output is silenceable and whether any delay is interruptable.



Text Editing is always Option 4 when device description text can be edited

5.6.1.6 Device Text Setting

The Device Text Setting option allows the device description to be changed. To select the Device Text option from the displayed menu:

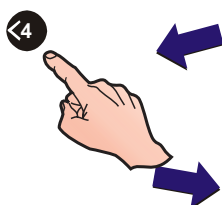
- 1 Using the numeric keypad, press the '**<4**' button to select the current associated device text. The following is displayed:

[Sensor nn - AAA] 1 : Zone (nn)
3 : Sensitivity 4 : [Blank/Existing Text]

- 2 The upper line of the display shows the 20-characters of text currently assigned to the device. The character that can be changed flashes.

[Blank/Existing Text] ↑ : Char ✓ : Done
> : Next < : Previous u1:Delete u3:Insert

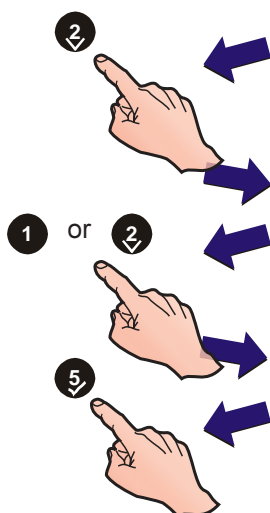
Note: For further information on changing text, refer to **Section 5.8, Zone Texts**.



5.6.2 Signalling Line Circuit (SLC) - Learn

This option provides automatic recognition of the devices connected to the SLC loop. The panel searches and learns all the devices on the loop. To perform the Learn procedure:

- Using the numeric keypad, press the '2' button to select the Learn option.



[S1 SLC] 1 : Devices 2 : Learn

- The LCD displays the Learn Device menu. Using the numeric keypad press either the '1' or the '2' button.

[S1 LEARN] 1 : Sensors 2 : Modules

- The LCD prompts for confirmation. Press the '5' key to start the Learn process.

[SLC] Learn Devices?

- One of the following is then displayed on the LCD. Press the '5' to Accept (confirm) a single device, '6' to Skip (ignore) the device and move to the next changed device or using the numeric keypad press '8' to Accept all (confirm) changed devices. Press the '<4' to Cancel and return to the learn devices prompt.
 - If learning sensors or modules that have been added to the loop, the LCD displays the first new device.

[LEARN] New device added : Snn ION
✓ : Accept > : Skip 8 : Accept all < : Cancel

- If learning any removed sensors or modules, the LCD displays the first removed device.

[LEARN] Device removed : Snn ION
✓ : Accept > : Skip 8 : Accept all < : Cancel

- If Learning a new loop or there is no change on the loop, the LCD displays a progress bar.

[Learn] Learn in progress



- When completed, the LCD displays the number of sensors or modules of each type and the total number.

- The display shows the following for sensors:

[Learn]	TOTAL	ION	OPT	TMP	MLT
	60	10	20	25	05

- The display shows the following for modules:

[Learn]	TOTAL	MCP	MON	SDR	CTL	RLY	ZMX
	41	30	02	05	02	0	02

- When the Learn procedure has been completed, press the '<4' button to return to the Learn Devices menu.



The (S)ensor is replaced with (M)odule when learning modules and the device types change appropriately.

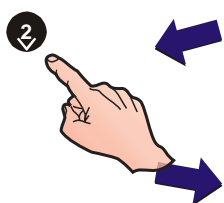
5.6.3 On-Board Circuits

This option permits configuration of the On-Board Output Circuits. There are six output circuits as defined in the following table.

Output No.	Type	Description
1 (B01)	Fixed Monitored Output Circuit (A)	Monitored Sounder (SDR) or Monitored Control Module (CTL) or Transmission Device (TxD) can be programmed for Fire Alarm, Fault, Pre-Alarm or Plant Warning CBE Rules. <i>Factory Default = Fire Alarm - All Zones.</i>
2 (B02)	Fixed Monitored Output Circuit (B)	Monitored Sounder (SDR) or Monitored Control Module (CTL) can be programmed for Fire Alarm, Fault, Pre-Alarm or Plant Warning CBE Rules. <i>Factory Default = Fire Alarm - All Zones.</i>
3 (B03)	Hardware Configurable CFG Output Circuit (C)	Can be configured for operation as a Monitored Output (Sounder Circuit or Relay Circuit) or as an Unmonitored Output (voltage-free style relay Circuit). Can be programmed for Fire Alarm, Fault, Pre-Alarm or Plant Warning CBE Rules. <i>Factory Default = Unmonitored Relay.</i>
4 (B04)	Hardware Configurable CFG Output Circuit (D)	Can be configured for operation as a Monitored Output (Sounder Circuit or Relay Circuit) or as an Unmonitored Output (dry-contact style relay Circuit). Can be programmed for Fire Alarm, Fault, Pre-Alarm or Plant Warning CBE Rules. <i>Factory Default = Unmonitored Relay.</i>
5 (B05)	-VE Output Circuit (1)	Unmonitored Output Circuit. Can be programmed for Fire Alarm, Fault, Pre-Alarm or Plant Warning CBE Rules. This output is normally used to drive an external relay. <i>Factory Default = General Pre-Alarm</i>
6 (B06)	-VE Output Circuit (2)	Unmonitored Output Circuit. Can be programmed for Fire Alarm, Fault, Pre-Alarm or Plant Warning CBE Rules. This output is normally used to drive an external relay. <i>Factory Default = Plant Warning</i>

To change the On-Board Output CBE rule:

- 1 Press '2' on the numeric keypad, select the On-Board menu from the Circuit Menu below.



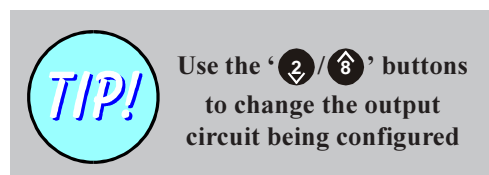
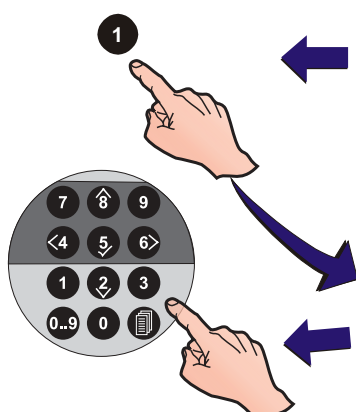
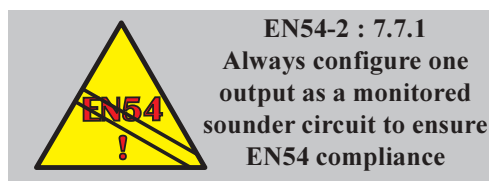
[S1 Circuit] 1 : SLC Loop 2 : On-Board

- 2 The display then shows the following menu. Select the appropriate action:

**[ON-BOARD] B01 (SDR)
1 : Type 2 : CBE Rule (01) ↑ : Change < : Exit**

- a. Using the numeric keypad press '1' to change the Type of output, or
- b. Press '2' on the numeric keypad to change the CBE Rule with which the On-board output is associated.
- c. Use the '2/8' to change the On-board output number and its associated CBE Rule.
- d. Press the '<4' to Cancel and return to the Circuit menu.

5.6.3.1 Output Type Setting



This option allows the configuration of the panel's on-board output circuits. To change the configuration:

- 1 Press the '**1**' button on the numeric keypad. The LCD prompts for the selection of an output type:

[ON-BOARD] B01 (SDR)
1 : Type 2 : CBE Rule (01) ↑ : Change < : Exit

Note: The options are Monitored Output Circuit Sounder (SDR), Transmission Device (TxD) or Monitored Output Circuit Relay (CTL) or Unmonitored Output Circuit (RLY).

- 2 To select the new type, using the numeric keypad press the '**1**', '**2**' or '**3**' button as required.

[ON-BOARD] B01 (SDR)
1 : SDR 2 : CTL 3 : TxD < : Cancel

Note: Only those types valid for the chosen output are available. The panel's -VE Outputs (B05/B06) are unmonitored and are thus fixed at type 'RLY'.

The following warning is displayed if 'TxD' is selected but without the correct link setting (refer to **Section 4.3.1 Jumper Link Options**):

[ON-BOARD] B01 (TxD)
Device Type Changed

5.6.3.2 CBE Rule Setting

This option allows each of the panel's on-board output circuits to be assigned to a CBE Rule. To change the CBE Rule, proceed as follows:

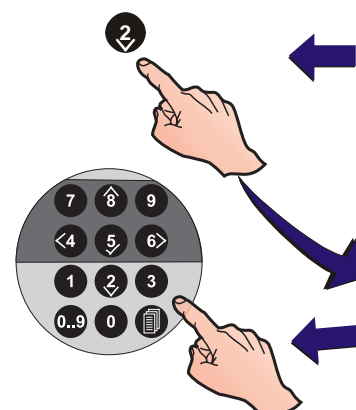
- 1 At the On-Board circuit option menu, using the numeric keypad press the '<2>' button to select the CBE Rules option.

[ON-BOARD] B0n (AAA)
1 : Type 2 : CBE Rule (nn) ↑ : Change < : Exit

- 2 The LCD prompts for entry of a new rule number. Use the numeric keypad to enter the CBE Rule required for the output circuit and confirm using the '<5>' button. The LCD then returns to the previous menu.

[ON-BOARD] B0n (AAA)
Enter New CBE Rule = nn

Refer to **Section 5.7, Control-by-Event Output Rules** for information concerning the CBE Rules. The rule defines whether the output will respond to zonal alarms and/or the END DELAYS / EVACUATE pushbutton. It also determines whether the output is silenceable and whether any delays are interruptable.



5.7 Control-By-Event Output Rules

This menu allows the configuration and viewing of the 64 Control-By-Event (CBE) Output Rules available to the commissioning engineer. CBE Rules 1 to 5 and 7 are pre-defined (see below for further information).

Each rule (including those that are pre-defined) can be modified and applied to On-Board Outputs and loop Output Modules (e.g. SDR, RLY, CTL). Each output is referred to as an assigned output. All relevant CBE rule information is shown on one display, as follows:

CBE 01 [FIRE] [ANY] 1-----16
1 : Change [EvSIIn] YYYYNYYNDDNCCNN

- a. A Fire rule. This CBE rule type activates assigned outputs in response to fire alarms in specified zones. Individual zones can be modified to determine the output response.

CBE 02 [PRE-ALARM] [ANY]
1 : Change [SI]

- b. A Pre-Alarm rule. This CBE rule type activates assigned outputs in response to a general pre-alarm condition at the panel.

CBE 03 [PLANT] 17-----32
1 : Change [] YYYYNYYNDDNCCNN

- c. A Plant Warning rule. This CBE rule type activates assigned outputs in response to plant alarms in specified zones. Individual zones can be modified to determine the output response.

CBE 04 [FAULT] [ANY]
1 : Change

- d. A Fault rule. This CBE Rule type activates assigned outputs in response to a general fault condition at the panel.

CBE 05 [FTR]
1 : Change

- e. A Fire Output/Transfer rule. This CBE Rule type activates assigned outputs in response to the operation of the Fire Output/Transfer relay.

CBE 07 [RESET]
1 : Change

- f. A Reset rule. This CBE Rule type activates assigned outputs for 5 secs in response to a panel reset.

The following rules are not pre-defined. Both are only selectable via the 'Change' option.

CBE nn [INPUTS] Dv1 Dv2 Dv3
1 : Change [EvSI] S01 --- M05

- a. A Device Input rule. Determines the output response to up to three (3) specified input devices (modules or sensors). An input from any of the specified devices will turn on the assigned outputs. Refer to **Section 5.7.9, CBE Rules: Device Inputs**.

CBE 08 [DAY MODE]
1 : Change

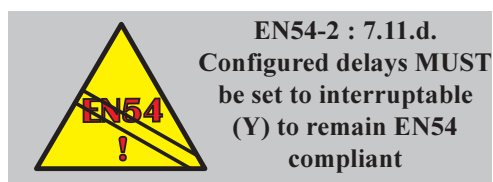
- b. A Day Mode rule. This CBE Rule type activates assigned outputs when the panel is operating in Day Mode.

CBE nn [EXTSYSTEM] SkTmr 1-----16
1 : Change [Smoke/Heat] YYYYNYYNDDNNNN

- c. An Extinguishing System rule. This CBE Rule type activates extinguishing release system(s) in response to fire alarm inputs in specified zones.

Each of the CBE Output Rules have various configurable states available, dependent on the rule type. These states are described below:

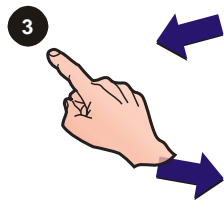
- a. **Filter-by-type** - options are ANY (all types), OTI (Optical, Thermal, Ionisation or MULTI sensor), AVS (ID60 only - see **Appendix 3**), MCP (manual call point), MON (monitor module). Extinguishing System options are Smoke/Heat, Sensor/MCP, VIEW/Sensor, Any Two Zones, Any Two Sensors, Any Single Sensor and Any Single Module. Output will only operate if the input is received from a device of the selected type.
- b. **Evacuate (EV)** - has two options Yes (Y) or No (N). If set to Y(es) assigned outputs activate when the END DELAYS/EVACUATE pushbutton is operated. Outputs will not operate when this option is set to N(o).
- c. **Silenceable (SL)** - has two options Yes (Y) or No (N). If set to Y(es) assigned outputs will silence when the SILENCE / RESOUND pushbutton is operated. If set to N(o) the outputs will only silence after being activated when the RESET pushbutton is operated.
- d. **Interruptable (IN)** - has two options Yes (Y) or No (N). If set to Y(es) operating the END DELAYS/EVACUATE pushbutton cancels currently operating delays and assigned outputs activate. If set to N(o), delays are NOT interruptable. The delays can only be cancelled by another qualifying alarm condition. This configuration does not comply with EN54 regulations.
- e. **Class Change (CI)** - has two options, Yes (Y) or No (N). If digital input 1 is set to Class Change (see **Section 5.5.16**) and the CBE Class Change option is set to Y(es), then the assigned outputs operate when digital input 1 is made. If set to N(o), digital input 1 (set to Class Change) does not operate the assigned outputs.
- f. **Two Zone (Tz)** - has two options Yes (Y) and No (N). If set to Y(es), at least two zones must be active before the CBE rule is triggered.
- g. **Zones** - determines the output response to fire or plant alarms on a zone by zone basis using two options: Zones 01 to 16 and Zones 17 to 32.
 - i Zones 01 to 16 - addresses the Fire rule silence options. Each zone can be configured as:
 - N(o) - the zone is NOT included in the CBE Rule, outputs will NOT be activated.
 - Y(es) - the zone is included in the CBE Rule. An alarm in this zone activates the outputs immediately.
 - (D)elay - the zone is included in the CBE Rule. An alarm in this zone will activate outputs after a delay. Not available for Fire rules if Two Zone is selected. Extinguishing System rules default to Delay.
 - (C)oincidence - the zone is included in the CBE Rule. Two alarms in this zone will activate outputs.



- (P)ulsed - the zone is included in the CBE Rule. An alarm in this zone will activate outputs immediately in pulsed mode. This mode is overridden if an alarm occurs in any zone that is included in this rule and for which Pulse Mode is not selected, also if a device is assigned to multiple CBE rules and a rule for which Pulse Mode is not selected becomes active.
- ii Zones 17 to 32 - addresses the plant warning rule silence options. These zones can be configured in the same manner as described for zones 01 to 16.
- h. **Soak Timer (Sk Tmr)** - has two options Yes (Y) or No (N). If set to Y(es) the associated extinguishing output is active only for the time specified in the System Soak Timer Setup menu.

To select the CBE Rule menu, proceed as follows:

- 1 With the Commissioning menu displayed, press the '3' button on the numeric keypad.

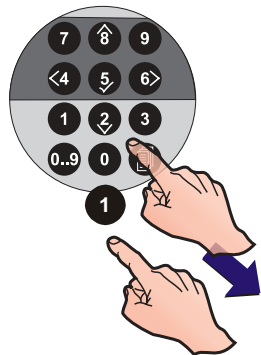


[S1 COMM] 1 : Setup 2 : Circuit
3 : CBE Rules 4 : Zones 5 : Access ↑ : More

- 2 The LCD prompts you to enter a CBE Rule number as shown below:

[CBE Rule] Select Rule No ____

Enter the required CBE Rule number using the numeric keypad and confirm by pressing the '5' button.



- 3 The LCD then displays the selected CBE Rule's current configuration and a menu option to allow changes to the rule. The displayed configurable options depend upon the rule type. To change the rule configuration press the '1' button on the numeric keypad.

CBE 01 [FIRE] [ANY] 1-----16
1 : Change [EvSiln]] YYYNNYYNDDNCCNN

Note: You can use the '2'/'8' buttons to step through each of the 64 CBE Rules.

- 4 At the menu below, use the numeric keypad to select the option that requires changing.

CBE Rule:01 1:Type 2:Filter 3:Evac
4:Silence 5:Interrupt ↑ : More

CBE Rule:01 6:Class Change 7:Two Zone
9:Zones ↑ : More

Note: Selectable options are dependent upon the type of the current CBE Rule.

5.7.1 Output Type

Nine (9) CBE Output Rule types are available. This menu allows the type to be selected. The current attributes of the selected Rule are displayed and can be edited. To change the Rule type, from the CBE Output Rules menu proceed as follows:

- 1 Press the '1' button on the numeric keypad to select the Type option from the menu. The LCD displays the Type menu:

CBE Rule:01 1:Type 2:Filter 3:Evac
4:Silence 5:Interrupt ↓ : More

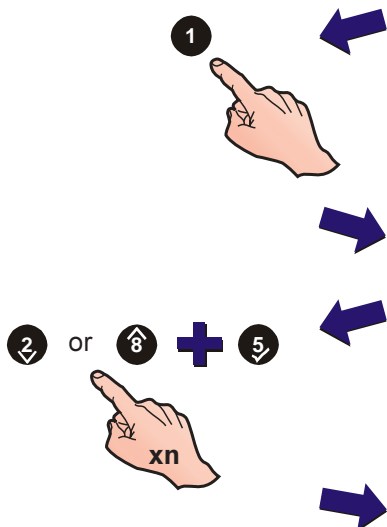
- 2 Using the '2'/'8' buttons, step through the CBE Output Rule types until the required type is displayed on the upper line, i.e. FIRE, EXTSYSTEM, DAY MODE, RESET, FTR, PLANT, PRE-ALARM, FAULT, INPUTS.

CBE Rule:01 Current Type = [FIRE]
↓ : Change Rule Type ✓ : Accept < : Cancel

- 3 Press the '5' button to confirm selection. The LCD displays only the appropriate editable settings for the selected rule, for example:

CBE 01 [FIRE] [ANY] 1-----16
1 : Change [EvSIIn] YYYYNYYNDDNCCNN

To change any of the settings on the CBE Output Rules refer to **Sections 5.7.2 Filter-by-type, 5.7.3 Evacuation, 5.7.4 Silence, 5.7.5 Interrupt Delay, 5.7.6 Class Change, 5.7.7 Two Zone, 5.7.8 Zones, 5.7.9 Device Inputs and 5.7.10 Soak Timer.**



5.7.2 Filter-by-Type

This option is available with the Fire, Fault, Pre-alarm and the Extinguishing System rules. The Filter-by-type option, when used with Fire, Fault and Pre-alarm categories has five selections: ANY, OTI, AVS, MCP and MON. The Filter-by-type option, when used with the Extinguishing System category has seven selections: Smoke/Heat, Sensor/MCP, VIEW/Sensor, Any Two Zones, Any Two Sensors, Any Single Sensor and Any Single Module. Refer to **Section 5.7, Control-by-Event Output Rules** for further information.

To select the type filter for Fire, Fault or Pre-alarm:

- 1 Press the '**2**' button (using the numeric keypad) to select the Filter option from the menu below.

CBE Rule:01	1:Type	2:Filter	3:Evac
4:Silence	5:Interrupt	↑ : More	

- 2 Press the '**2**'/'**8**' buttons to select the required filter.

CBE Rule:01	Current Filter Type = [ANY]
↑ : Change Filter Type	✓ : Accept < : Cancel

- 3 Confirm the selection by pressing the '**5**' button. To cancel the selection, press '**<4**' button.

To select the type filter for Extinguishing System:

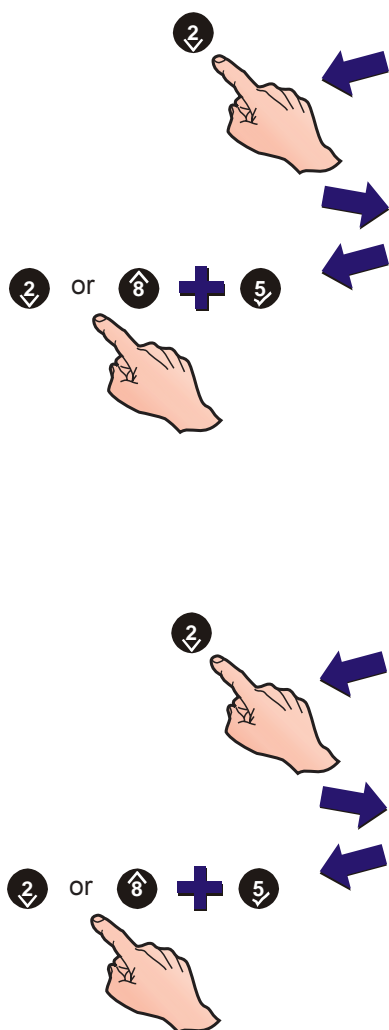
- 1 Press the '**2**' button (using the numeric keypad) to select the Filter option from the menu below.

CBE Rule: 01	1:Type	2:Filter
8:Soak Timer	9:Zones	

- 2 Press the '**2**'/'**8**' buttons to select the required filter.

CBE Rule:nn	Ext. Filter Type = [One sensor]
↑ : Change Filter	✓ : Accept < : Cancel

- 3 Confirm the selection by pressing the '**5**' button. To cancel the selection, press '**<4**' button.



5.7.3 Evacuation

The Evacuation option has two states, Yes (Y) and No (N). This option is available with the Fire, Pre-Alarm and Device Inputs rules. To change the Evacuation setting:

- 1 Press the '**3**' button (using the numeric keypad) to select the Evacuation option from the menu below.

CBE Rule:01	1:Type	2:Filter	3:Evac
4:Silence	5:Interrupt		↑ : More

- 2 Press the '**6>**' button to select the required setting. Refer to **Section 5.7, Control-By-Event Output Rules** for further information.

CBE Rule:01	Evacuate = [Y]
>:Change ✓ :Accept	< : Cancel

CBE Rule:01	Evacuate = [N]
>:Change ✓ :Accept	< : Cancel

- 3 Confirm the selection by pressing the '**5**' button. To cancel the selection, press '**<4**' button. In either case the menu below is re-displayed.

CBE Rule:01	1:Type	2:Filter	3:Evac
4:Silence	5:Interrupt		↑ : More

5.7.4 Silence

The Silence option has two states, Yes (Y) and No (N). This option is available with the Fire, Pre-Alarm and Device Inputs rules. To change the Silence setting from the CBE Output Rules menu:

- 1 Using the numeric keypad, press '**<4**' to select the Silence option from the menu below.

CBE Rule:01	1:Type	2:Filter	3:Evac
4:Silence	5:Interrupt		↑ : More

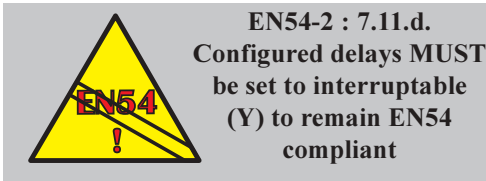
- 2 Press the '**6>**' button to select the required setting. Refer to **Section 5.7, Control-By-Event Output Rules** for further information.

CBE Rule:01	Silence = [N]
>:Change ✓ :Accept	< : Cancel

CBE Rule:01	Silence = [Y]
>:Change ✓ :Accept	< : Cancel

- 3 Confirm the selection by pressing '**5**'. To cancel the selection, press '**<4**' button. In either case the menu below is re-displayed.

CBE Rule:01	1:Type	2:Filter	3:Evac
4:Silence	5:Interrupt		↑ : More



5.7.5 Interrupt Delay

The Interrupt Delay option has two settings, Yes (Y) or No (N). This option is only available with the Fire rule.

Caution: Selecting 'No' contravenes the requirements of EN54.

To change the Interrupt setting from the CBE Output Rules menu:

- 1 Press the '5' button using the numeric keypad to select the Interrupt option.

CBE Rule:01	1:Type	2:Filter	3:Evac
4:Silence	5:Interrupt		↑ : More

- 2 Press the '6' button to select the required setting. Refer to **Section 5.7, Control-by-Event Output Rules** for further information.

CBE Rule:01	Interrupt = [N]
>:Change ✓ :Accept	< : Cancel

CBE Rule:01	Interrupt = [Y]
>:Change ✓ :Accept	< : Cancel

- 3 Confirm the selection by pressing the '5' button. To cancel the selection, press '4'. In either case the menu below is re-displayed.

CBE Rule:01	1:Type	2:Filter	3:Evac
4:Silence	5:Interrupt		↑ : More

5.7.6 Class Change

This control parameter has two options, Yes (Y) and No (N). These indicate whether or not the selected CBE Rule's assigned outputs activate when Digital Input 1 is configured as Class Change and then operated. To configure Class Change, from the CBE Output Rules menu:

- 1 Press the '6' button using the numeric keypad to select the Class Change option.

CBE Rule:01	6:Class Change	7:Two Zone
	9:Zones	↑ : More

- 2 Press the '6' button to select the required setting. Refer to **Section 5.7, Control-by-Event Output Rules** for further information.

CBE Rule:01	Class Change = [N]
> : Change ✓ : Accept	< : Cancel

CBE Rule:01	Class Change = [Y]
> : Change ✓ : Accept	< : Cancel

- 3 Confirm the selection by pressing the '5' button. To cancel the selection, press '4'. In either case the menu below is re-displayed.

CBE Rule:01	6:Class Change	7:Two Zone
	9:Zones	↑ : More

5.7.7 Two Zone

The Two Zone option has two states, Yes (Y) and No (N). This option is available with the Fire, Pre-Alarm and Plant Warning rules. To change the Two Zone rule setting:

- 1 Press the '7' button (using the numeric keypad) to select the pattern Two Zone option from the menu below.

CBE Rule:01	6:Class Change	7:Two Zone
	9:Zones	↑ : More

- 2 Press the '6' button to select the required setting. Refer to **Section 5.7, Control-By-Event Output Rules** for further information.

CBE Rule:01	Two Zone = [N]
>:Change ✓ :Accept	< : Cancel

CBE Rule:01	Two Zone = [Y]
>:Change ✓ :Accept	< : Cancel

- 3 Confirm the selection by pressing the '5' button. To cancel the selection, press '<4'. In either case the menu below is re-displayed.

CBE Rule:01	6:Class Change	7:Two Zone
	9:Zones	↑ : More

5.7.8 Zones

The Zones option determines the output response when a zone detects an alarm. Each zone can be configured as Yes (Y), No (N), Pulse (P), Coincidence (C) or Delay (D) - see **Section 5.7** for definitions of these parameters.

If Day Mode is enabled (**Section 5.5.17, Day mode activity**) delays do NOT occur unless manually activated. Manual activation can occur at any time of day - it does not have to be during the set Day Mode period. Delays are automatically de-activated with the end of the day mode period.

To change the CBE Rules: Zone Setting from the CBE Rules: Output menu, follow the described procedure below:

- 1 From the menu options below, press the '9' button to select the Zones option.

CBE Rule:01	6:Class Change	7:Two Zone
	9:Zones	↑ : More

- 2 The LCD displays the pattern number and zone range (either 1 to 16 for fire alarms or 17 to 32 for plant alarms) on line 1. Line 2 of the LCD displays the selected zone's number, the full description of its current status and the zone's flashing editable status.

To select a zone, press the '6>' button until the appropriate zone number appears on line 2 in the left-hand corner. The display cycles from 16 to 1 and 32 to 17.

CBE Rule 01	Zones	1-----16
[Zone 01]	[Yes] YYYYNYYNDNCCNN

CBE Rule 01	Zones	1-----16
[Zone 06]	[No] YYYYNYYNDNCCNN

- 3 To change a zone's status, press the '2'/'8' buttons until the required state is displayed.

CBE Rule 01	Zones	1-----16
[Zone 06]	[Yes] YYYYNYYNDNCCNN

CBE Rule 01	Zones	1-----16
[Zone 06]	[No] YYYYNYYNDNCCNN

CBE Rule 01	Zones	1-----16
[Zone 06]	[Pulse] YYYYNYYNDNCCNN

- 4 Confirm the changes by pressing the '5' button. Press '4' to cancel any changes.

5.7.9 Device Inputs

The Device Inputs option is only available if the Device Inputs CBE Rule is selected. This option determines the output response to up to three (3) specified input devices (modules or sensors). An input from any of the specified devices will turn on the associated outputs.

To select the input devices:

- 1 Follow the procedures in **Section 5.7.1, CBE Rules: Output Type** to change the CBE Rule type to Inputs. The LCD displays the following menu:

CBE 09 [INPUTS]	Dv1	Dv2	Dv3
1 : Change [EvSI]	---	---	---

- 2 Using the numeric keypad press the '1' button to display the following menu:

CBE Rule:09	1:Type	2:Evac	4:Silence
6:Class Change		10:Devices	

- 3 At the numeric keypad press the '0' button to select the 'Devices' option. The LCD then prompts for a device type selection (sensor or module) or the removal of a device that has already been entered. Alternatively press the '<4>' button to exit this menu.

CBE Rule 09	Device 1: ---
1:Sensor 2:Module	3:Remove <: Exit

- 4 Use the '2'/'8' buttons to select one of the 3 Device Inputs to be edited.

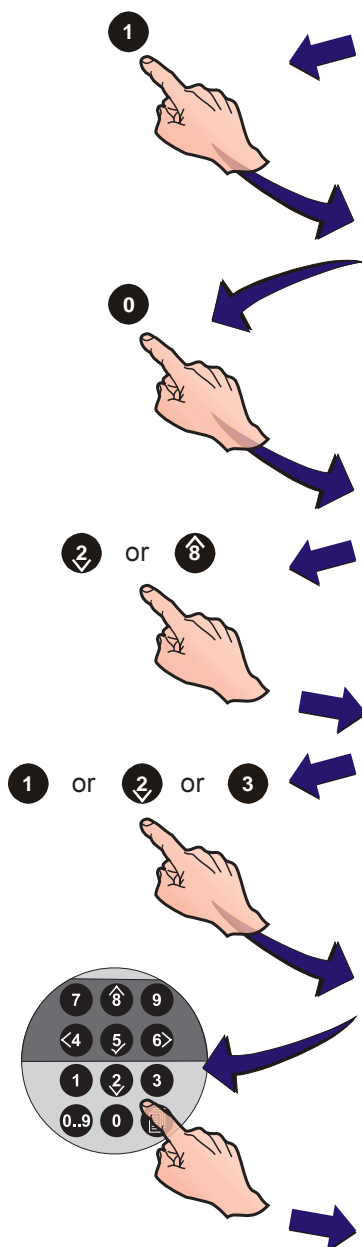
CBE Rule 09	Device n: Snn
1:Sensor 2:Module	3:Remove <: Exit

- 5 Select either '1' (sensor) or '2' (module) to select device address entry, or '3' to remove the currently selected device. If a device is to be entered, the following (example is for a sensor) is displayed:

CBE Rule 09	Device n: ---
Enter sensor address	<: Cancel

- 6 At the numeric keypad, enter the device address and press the '5' button to confirm. Alternatively press '<4>' repeatedly to cancel the address entry.

CBE Rule 09	Device n: Snn
1:Sensor 2:Module	3:Remove <: Exit



5.7.10 Soak Timer

The Soak Timer allows the extinguishing output to be activated for a specified time. If enabled, the extinguishing output is activated for the period specified by the Ext. System Soak Timer panel Setup option (see **Section 5.5.5 Extinguishing System Soak**); if disabled, the CBE rule activates associated outputs until the panel is reset.

This option also affects the operation of device type MRL. If enabled, associated MRL inputs will start the CBE Rule extinguishing system delay (**Section 5.5.4**); if disabled, the MRL inputs will start the CBE Rule immediately (for Fire rules, will start the day mode delay, if active).

To enable/disable the Soak Timer:

**CBE Rule: nn 1:Type 2:Filter
8:Soak Timer 9:Zones**

- 1 Press the '**8**' button (using the numeric keypad) to select the Soak Timer option from the menu below.

**CBE Rule:nn Soak Timer Enable = [N]
> : Change ✓ : Accept < : Cancel**

- 2 Press the '**2**'/'**8**' buttons to select Y(es) or N(o) for Soak Timer Enable.

**CBE Rule:nn Soak Timer Enable = [Y]
> : Change ✓ : Accept < : Cancel**

- 3 Confirm the selection by pressing the '**5**' button. To cancel the selection, press '**<4**' button.

5.8 Zone Texts

The Zone Texts menu enables the editing or viewing of text associated to a selected zone. To view or edit any zone text descriptions, proceed as follows:

- 1 At the main Commissioning menu, using the numeric keypad press the '**<4**' button.

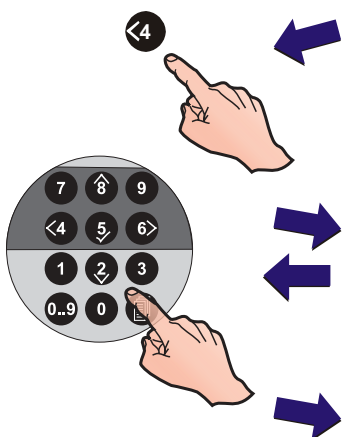
**[S1 COMM] 1 : Setup 2 : Circuit
3 : CBE Rules 4 : Zones 5 : Access ↑ : More**

- 2 The Zone Text menu is displayed. Enter the zone number required using the numeric keypad, then press the '**5**' button to select the zone.

[Zone Text] Select Zone No ____

- 3 The LCD then displays the existing 20-characters of text assigned to the zone on the upper line.

**[<blank/existing text >] ↑ : Char ✓ : Done
>:Next <:Previous u1:Delete u3:Insert**

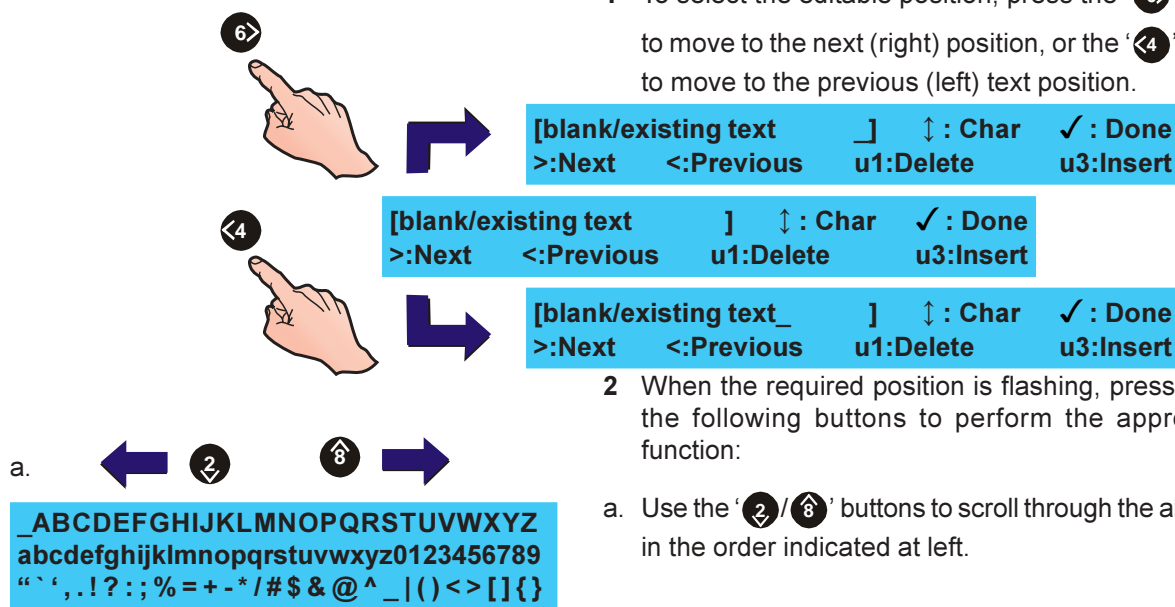


Text Editing


Note: The following also applies when editing device and system text.

The upper line of the LCD editable text menu displays an area of twenty (20) characters. A flashing position on the LCD indicates that the position is currently editable. To enter or edit existing text, follow the procedure below.

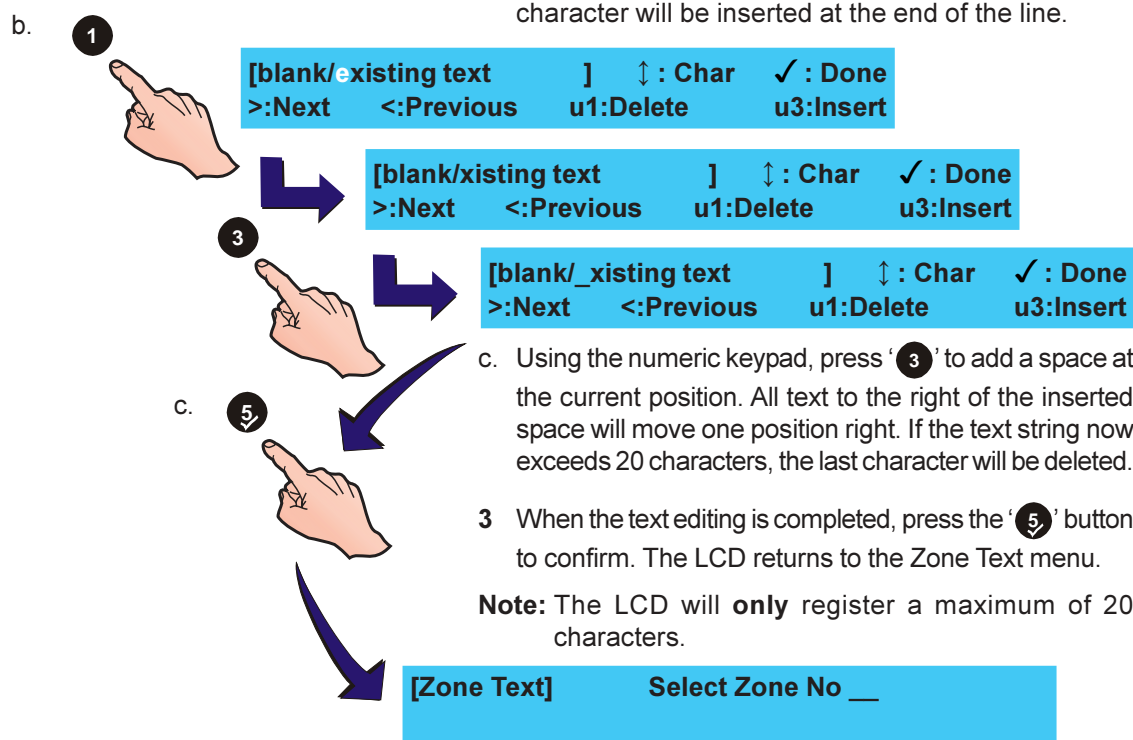
- 1 To select the editable position, press the '**6**' button to move to the next (right) position, or the '**4**' button to move to the previous (left) text position.



- 2** When the required position is flashing, press one of the following buttons to perform the appropriate function:

- a. Use the ''/

- b. Using the numeric keypad, press '1' to delete the flashing character. All text to the right of the deleted character will move one space left and a blank character will be inserted at the end of the line.



- 4 Select another zone for text editing or press the '**4**' or '**5**' button to return to the main Commissioning menu.

5.9 Access Options

The Access options menu allows the configuration of the following access passcodes:

- Up to ten (10) User passcodes.
- One Commissioning engineer passcode.

The Access option is available from the Commissioning menu. To configure access passcodes:

- At the Commissioning menu, using the numeric keypad press the '**5**' button to display the Access options menu.

[S1 COMM] 1 : Setup 2 : Circuit
3 : CBE Rules 4 : Zones 5 : Access ↑ : More

- Use the numeric keypad to select the appropriate option:

- Press the '**1**' button to select the User option.
- Press the '**2**' button to select the Engineer option.

[S1 Access] 1 : User 2 : Engineer

- Selecting the User option ('**1**' on the numeric keypad) displays the following menu:

[S1 Access] Passcode 0 = nnnn
>:Change 1:Delete ↑ : More <:Cancel

- Use the '**2**'/'**8**' buttons to select a user access code number (range 0 to 9).

[S1 Access] Passcode 3 = nnnn
>:Change 1:Delete ↑ : More <:Cancel

- Press '**1**' on the numeric keypad to delete the currently displayed access code and disable that user.

[S1 Access] Passcode 3 = _____
>:Change 1:Delete ↑ : More <:Cancel

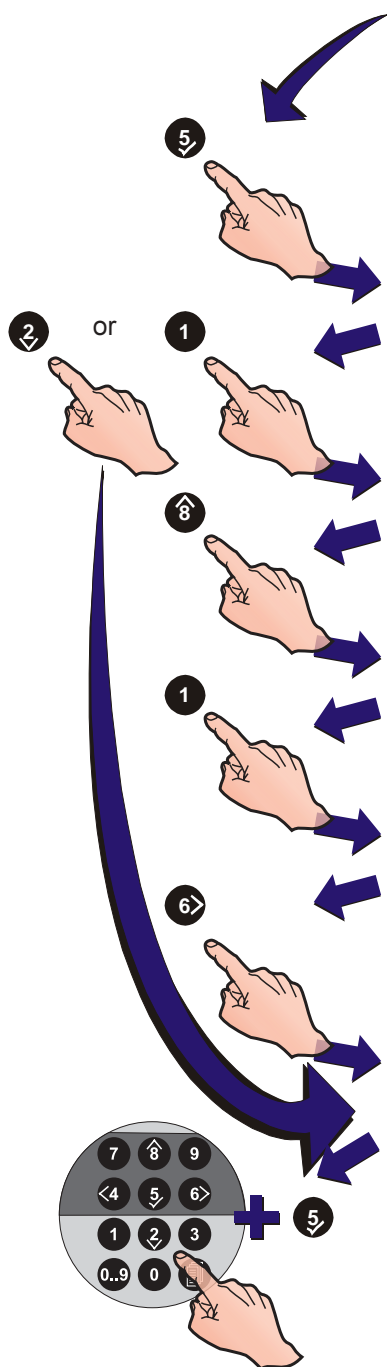
- Press the '**6>**' to display the change menu, see below.

- The change menu prompts for entry of a new access code:

[Setup] Passcode 0 = nnnn
Enter new value _____ ✓ : Confirm <:Cancel

Note: If the Engineer option is selected the access code number is replaced by (ENG).

- Using the numeric keypad, enter a new four (4) digit passcode and press '**5**' to confirm. After editing a 'User' passcode the display automatically returns to the User passcode selection menu. The 'Engineer' passcode returns to the Access menu.



5.10 System Options

The System menu allows:

- The crystal frequency to be set.
- The existing panel configuration to be cleared.

5.10.1 Crystal Frequency

To adjust the Crystal Frequency:

- Press the ' \downarrow /' \uparrow ' keys to display additional options (6 : System, 7 : Normal and \uparrow : More) from the main Commissioning menu.

\downarrow or \uparrow

[S1 COMM] 1 : Setup 2 : Circuit
3 : CBE Rules 4 : Zones 5 : Access \uparrow : More

- On the numeric keypad, press the ' \downarrow ' button to display the System menu.

\downarrow + 1

[S1 COMM] 6 : System 7 : Normal
 \uparrow : More

- At the System menu select the required option. Using the numeric keypad, press the ' \downarrow ' button to select the Crystal option.

[S1 SYSTEM] 1 : Crystal 2 : Wipe Memory

\downarrow or \uparrow + \downarrow

- Using the ' \downarrow /' \uparrow ' buttons, scroll through the Crystal Frequency options until the displayed value matches that written on the PCB. Press the ' \downarrow ' button to update/confirm the selection and return to the System menu.

Crystal Frequency = nn.nnnnn MHz
 \checkmark : Update \uparrow : Change < : Cancel

5.10.2 Wipe Memory

CAUTION: USE THIS OPTION WITH CARE! ALL CONFIGURATION PARAMETERS WILL BE DELETED!

To wipe the panel's memory, from the System menu:

- 1 Using the numeric keypad, press the '2' button to select the Wipe Memory option.

[S1 SYSTEM] 1 : Crystal 2 : Wipe Memory

- 2 Press the '5' button to confirm the wipe memory procedure. The LCD displays the following message.

Wipe ALL configuration memory
Press ✓ to confirm < : Cancel

Wiping configuration memory
Please wait . . .

When the configuration has been wiped the LCD re-displays the System menu.

5.11 Normal

The Normal function returns the display to the Level 2 Configuration menu in a normal supervisory mode.

To return to the Level 2 Configuration menu and retain Level 3 access (Engineer):

- 1 Press the '2/8' buttons to display additional options (6 : System, 7 : Normal and ↑ : More) from the Commissioning menu.

[S1 COMM] 1 : Setup 2 : Circuit
3 : CBE Rules 4 : Zones 5 : Access ↑ : More

- 2 Using the numeric keypad, press '7'. The panel will reset and return to normal supervisory mode at the User Menu.

[S1 COMM] 6 : System 7 : Normal
↑ : More

When ALL configuration procedures have been completed, remember to fit the Configuration Lock jumper Link (J9).

[S1] 1:Test 2:Disable/Enable 3:Clock
4:View Mode 5:Commission

Appendix 1 - Specification

ID50 Series Panel

General:

This fire control panel is designed to comply with the requirements of EN 54 Part 2/4: 1997. In addition to the basic requirements of EN 54-2, the panel may be configured to conform with the following optional functions - the applicable clauses of EN 54-2 are referenced as follows:

Options	Clause
Indications:	
Fault signals from points	8.3
Recording of the number of entries into fire alarm condition	7.13
Controls:	
Coincidence detection	7.12
Delay of the immediate actioning of outputs	7.11
Disabling of each address point	9.5
Test condition	10
Outputs:	
Fire alarm device(s) (Sounders)	7.8
Fire alarm routing equipment	7.9
Fire protection equipment	7.10
Fault warning routing equipment (requires monitoring by fault routing equipment)	8.9

This panel complies with the European Low Voltage Directive 73/23/EEC (and the amending Directive 93/68/EEC), by the application of the safety standard EN 60950.

The panel conforms with the essential protection requirements of the EMC Directive 89/336/EEC (and the amending Directives 92/31/EEC and 93/68/EEC), by the application of EN 50081-1 (emissions) and EN 50130-4 (immunity).

Mechanical:

Construction:	Sheet steel enclosure carries all displays and controls under a steel sheet cover.
Dimensions (mm):	365(h) x 380(w) x 110(d)
Approx Weight	
Back Box:	6kg (no batteries)

Environmental:

Climatic classification:	3K5, (IEC 721-2-3)
Operating temperature:	-5°C to +45°C, (recommended +5°C to 35°C)
Humidity:	5% to 95% R.H.
Height above sea level:	Maximum, 2000m
Panel sealing:	IP 30, (EN 60529)
Vibration:	EN 60068-2-6, 10-150Hz at 0.981ms ⁻² (Meets the requirements of EN 54-2/4)
EMC:	Emissions: EN 50081-1 Immunity: EN 50130-4
Safety:	EN 60950

Displays and Indications:

Alphanumeric display:	2 line x 40 character, backlit LCD.
LED Status Indicators:	DISABLEMENT, TEST, BUZZER MUTED, PLANTALARM, DELAYED MODE, RELAY DISABLE, POWER, FAULT, POWER SUPPLY FAULT, EARTH FAULT, SYSTEM FAULT, SOUNDER FAULT, SOUNDERS DISABLED, SOUNDERS SILENCED.
Zone Indicators:	Individual FIRE and Fault/Disable/ Test indicators for 16 zones.

Controls:

Dedicated flush
pushbuttons are provided
for the following functions: RESET, MUTE BUZZER, SILENCE/
RESOUND, END DELAYS/
EVACUATE.

Additional pushbuttons for
configuration and selection

of software functions:



10 BUTTON NUMERIC KEYPAD

System Capacity:

Number of loops:	1
Number of zones:	32 (16 Fire + 16 Plant Alarm)
Devices per loop:	99 sensors + 99 modules or 99 sensors + combination of up to 99 modules/sounders within strict limits.

External Connections:

Cable entry:	16 x 20mm knock-outs in top of cabinet.
Terminals:	All external connections made through screw terminals, each of which will accept cable sizes between 0.5mm ² and 2.5mm ² .

Electrical:

Classification:	Installation Class 1, (panel must be earthed).
-----------------	------------------------------------------------

Panel Ratings**Unloaded:**

Quiescent:	90mA
Alarm:	110mA

Fully Loaded:

Quiescent:	950mA (includes 0.48A Max. Battery Charge Current)
Alarm:	1.5A

Power Supply Unit (PSU)**Input Ratings:**

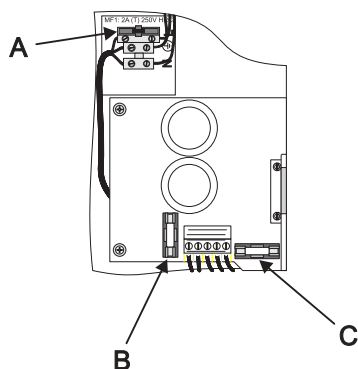
Supply Rating:	230VAC \pm 15%, 50Hz, 1.0A
Fuse Rating (MF1):	T 2A 250V H Ceramic.

Batteries:

Internal batteries:	Two 12V, 12Ah sealed, lead-acid types MUST be used.
---------------------	-----------------------------------------------------

Note: Battery lifetime depends on the ambient temperature; refer to the battery manufacturer's technical specification for guidance. (Refer to 'Panel Ratings - Fully Loaded' for charger limitations).

Maximum battery ratings: 12Ah



Fuses:

The location of the panel fuses is given here, together with their ratings and their type.

a.	MF1	Mains Supply	T 2A 250V H
b.	FS1	Transformer	T 5A 250V H
c.	FS2	Battery	T 5A 250V H

T = time delay (i.e. anti-surge), H = high break capacity, as defined by EN 60127.

Outputs:

- Two dedicated Sounder Outputs.
- Two Sounder or Volt-free Contact (VFC) - selectable outputs.
- Two -VE Outputs (RLY) - unselectable outputs.
- One loop output.
- One DC auxiliary output.

Sounder Output Rating

Type:	Voltage reversal.
Output voltage:	26 to 28V when active; -6.8V to -9V when inactive.
Maximum load:	1A Total (max. 700mA per output).
Fuse rating:	Not applicable.
Monitoring:	Open- and short-circuit.

Volt-free Contact (VFC) Output Rating

Type:	Single-pole change-over
Maximum load:	Contacts rated 30V 1A
Fuse rating:	Not applicable

Switched -VE Output Rating

Output voltage:	21 to 30V
Maximum load:	83mA (total for both outputs)

Loop Output

Output voltage:	22.5 to 26.4V.
Maximum load:	0.5A peak current*
Max. loop impedance:	20 ohms (-ve cable only, with duplicate address detection) or 40 ohms (-ve cable only, without duplicate address detection).
Max. loop capacitance:	0.5μF

Up to 198 loop devices (up to 99 sensors and 99 modules) may be fitted to the analogue loop.

The communication with devices on the loop uses the Notifier 'CLIP' protocol. Refer to **Hardware Recommendations** for a list of compatible devices and loading limitations.

* Total system load is limited by the transformer output. The Notifier Loop and Battery Calculator Support Tool, should be used to ensure that the system is NOT overloaded.

DC Auxiliary Rating

Output voltage range:	26 to 28V
Maximum load:	
Quiescent:	150mA*
Alarm:	0.25A* Cables should be capable of carrying a minimum 1A.
Fuse rating:	Not applicable

Note: It is recommended that the auxiliary output should not be used in the quiescent state other than to provide a supply to drive ancillary devices' power indicators.

RS485 Serial Port (Optional)

Isolation:	Functional at 30V.
Baud rate:	1200 Baud.
Connector:	Terminal block on RS485 Interface Module PCB.
Maximum cable length:	1200metres (minimum of 1.5mm ² screened cable recommended)

Configuring

Configuration methods:	Front panel keypad. Offline using PC Offline Support Tool program.
Configuration access:	Keypad access is passcode-protected (user-definable) for all configuration. Refer to Sections 4 & 5 of this manual, and to 997-264 ID50 Series Panel Operating Manual, Section 4 for further information.

Default Configuration Passcodes:

Level 2 Passcode	2 2 2 2
Level 3 Passcode	3 3 3 3

Repeaters/Mimics

Refer to **997-411, IDR-2A, 2P & 6A Repeaters User Manual** and **997-412, IDR Mimic Installation and Commissioning Manual** for the specification.

Hardware Recommendations:

Recommended Cables:

We recommend that the loop wiring should be wired in 2-core cables and each 2-core cable should be specific to one function.

The RS485 Communications cable used should be rated as suitable for up to 200mA in as short circuit condition.

Cable Type	Manufacturer	Cable Name	Type Number	Application
Foil Screen	Pirelli	FP200	-	All
Foil Screen	Pirelli	FP200 Gold	-	All
Foil Screen	Draka	Firetuf	FTZ 2E1.5	All
Copper Clad	BICC	MICC	CCM2L1.5RG	All
Foil Screen	H & S	Radox	FR Comms	All
Foil Screen	Draka	-	FDZ 1000	Data Comms
Foil Screen	AEI	Firetech	F2C1.5E	Data Comms
7/0.2 mm 4-core, screened	Arrow	-	7-2-4S	External RS232 (e.g. Printer)

Compatible SLC Devices:**Sensors**

CPX-551E	Standard Ionisation Sensor
CPX-751E	Low Profile Ionisation Sensor
SDX-551E	Standard Optical Sensor
SDX-751XXXX	Low Profile Optical Sensor
FDX-551XXX	- Grade 2 Thermal Sensor;
	- High Temperature Thermal Sensor;
	- Grade 1 Rate of Rise Thermal Sensor
LPX-751	VIEW laser-based smoke sensor
HPX-751E	HARSH Optical Sensor
IPX-751	Advanced MULTI Sensor
LPB-500	Loop Powered Beam Detector (TX/RX pair)
LBP-620/620R	Loop Powered Beam Detector
IDX-751 ¹	HAZARD Intrinsically-safe smoke sensor
B524IXXX	- Sensor Base With Standard Isolator;
	- Sensor Base With FET Isolator;
	- Sensor Base With Relay Output;
	HARSH Sensor Base
B501	Standard Sensor Base

Modules

M500KACGB	Manual Call Point
M500KACW	Weatherproof Manual Call Point
MMX-1E	Monitor Module
MMX-101E	Mini Monitor Module
MMX-102E	Micro Monitor Module
MMX-10	10 Way Relay Module
ZMX-1	Conventional Zone Monitor Module
CMX-2E	Control Module (Monitored or Relay)
PS2-CMX	Control Module With PSU and 2 Bell Circuits
CMX-10R	10 Way Relay Module
ISO-X	Standard Isolator Module
ISO524	Mini Isolator Module
MRM-1XXX	Mains Relay Modules
ANS41	Addressable Loop Powered Sounder
ANSE4	Addressable Externally Powered Sounder
ABS4 ²	Addressable Loop Powered Sounder Base
ABSE4 ²	Addressable Externally Powered Sounder Base
IBS3	Addressable Loop Powered Base Sounder with Built-in Sensor Base
AWS3 ²	Addressable Loop Powered Wall Sounder.

¹ Requires the Y72221 Isolation Unit

² Colour options available

Some devices may be under development, Contact NOTIFIER for device availability

Appendix 2 - ID60 Single Loop Panel Differences

The **ID60 Panel** differs from the **ID50 Panel** in that it supports Very Intelligent Early Warning (VIEW™) sensors. This appendix describes the configuration requirements of these sensors when used with the **ID60 Panel**. The addition of these sensors does NOT affect the panel installation or commissioning.

When VIEW™ sensors are configured some additional menu options become available.

Note: For more information about VIEW™ sensors refer to VIEW™ Application Guide (ref. 997-198).

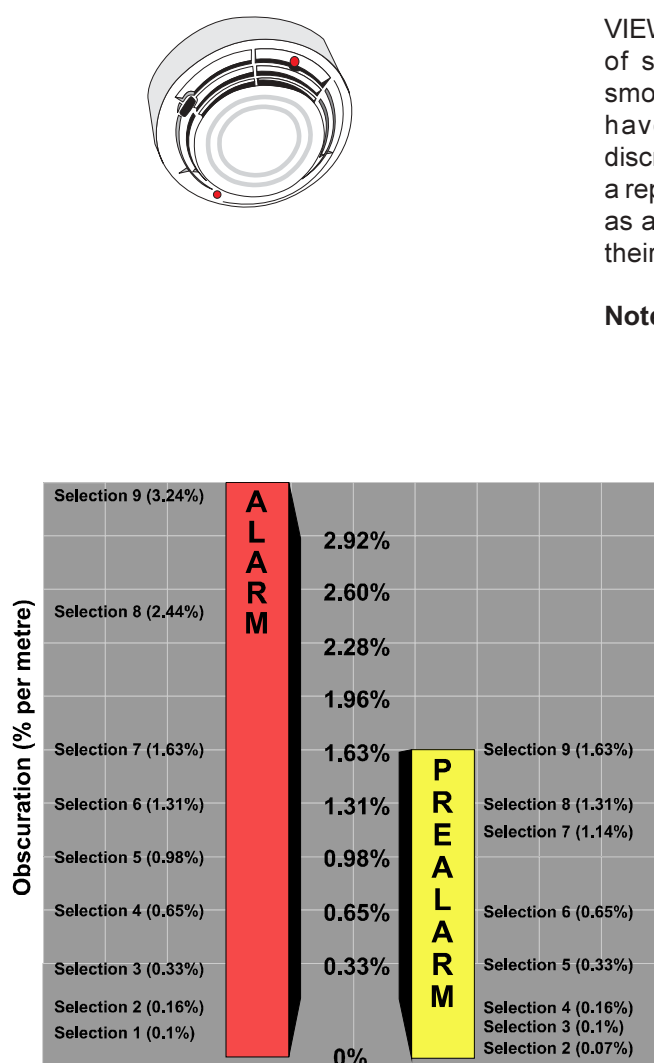
VIEW Sensitivities

VIEW™ sensors are able to detect very small amounts of smoke resulting from an incipient fire, such as smouldering wiring insulation. Because VIEW™ sensors have an enhanced sensitivity and the ability to discriminate between airborne smoke and dust particles, a representatively narrower percentage band, expressed as a 'percentage per metre obscuration', is used to set their sensitivity than is used on other types of sensors.

Note: The term 'percentage per metre obscuration' describes the smoke saturation level per unit volume of air. Normal sensors typically detect a fire condition between 3%/m and 5%/m obscuration.

VIEW™ sensors can be configured, either by the Offline Configuration program or at the Panel, using nine sensitivity thresholds for pre-alarm and alarm. Level 1 (L1) is the most sensitive and level 9 (L9) the least sensitive. Pre-alarm can be disabled by selecting level 0 (L0).

The diagram at left shows smoke obscuration for each of the nine level selections. The standard sensitivity is set at 2.44%/m (L8) or less, high or enhanced sensitivity is between 2.44%/m (L8) and 0.98%/m (L5) and very high sensitivity is 0.98%/m (L5) or lower %/m.





VIEW™ sensors remain inoperable for 60 seconds after being replaced while calibrating

Co-operative Multi-sensing

Co-operative sensing is carried out automatically between sensors in the same group. Grouped sensors co-operate within the group providing greater levels of sensitivity with a reduced risk of false alarms. When first installed, VIEW sensors are all allocated to group 1 but they can be configured in up to 50 groups. Sensors allocated to group '0' operate independently. An example of VIEW™ sensor co-operative grouping is given below:

<u>Address</u>	<u>Type</u>	<u>Zone</u>	<u>Group</u>
03	AVS	1	01
04	AVS	1	02
05	AVS	1	02
09	AVR	1	01
10	AVS	1	02
11	AVS	1	00
15	AVS	2	01
16	AVS	2	01
17	AVS	2	02
27	AVS	2	01

Each group can have one or more VIEW™ sensors configured as reference sensors (AVR). Sensors placed such that external smoke influences (eg. bonfires and exhaust fumes) can be detected early should be configured as AVRs. When these influences are detected by the AVR the group can then be temporarily desensitised.

VIEW™ Sensor Sensitivity

Most local codes of practice require very low levels of alarm sensitivity selection be tested on-site before implementation. Alarm sensitivity level 6 (L6) and below generally require a 90-day test to ensure the sensor environment is suitable for a higher sensitivity setting. This is not required for high levels of pre-alarm sensitivity selection.

Dynamic Intelligent Grouping (DIG) Operation

The Dynamic Intelligent Grouping (DIG) Operation only performs calculations on up to five sensors with the highest value. This is an advantage in a group of many sensors, as any condition will quickly be recognised by the panel.

A2.1 Calibrating VIEW™ Sensors

Each VIEW™ sensor is automatically calibrated on first operation with the panel. This calibration is completed at one of the following times:

- Approximately 90 secs after the panel is powered on.
- 60 secs after the sensor is installed on a panel which is already operating normally.

During this initial period (which is required to allow the VIEW™ sensor to stabilise) the sensor must not be exposed to smoke or other abnormal conditions, otherwise the panel may report a sensor fault.

If a VIEW™ sensor is removed from the operational loop, or communication with the panel is broken for a minimum of 30 secs, recalibration will take place automatically.

Note: If a VIEW™ sensor is removed and cleaned, or replaced with a new one, wait at least 30 secs after removal before replacing it.

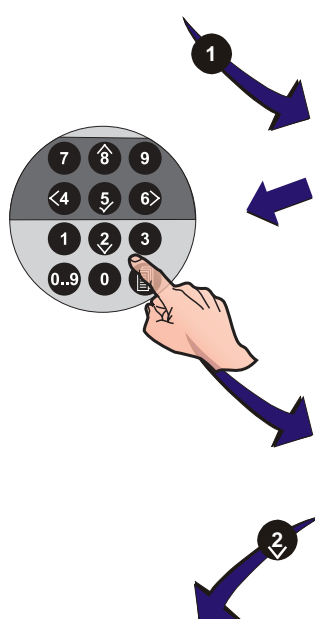
A2.2 Learning Individual VIEW™ Sensors

When installed on a loop from the **ID60 Panel**, each VIEW™ sensor is assigned the Advanced VIEW™ Sensor (AVS) type by default. This may then be configured as Advanced VIEW™ Reference (AVR) type.

A VIEW™ sensor may be learnt in the same manner as any sensor but has an additional 'Type' configuration option. The procedure to configure the sensor type is as follows:

- 1 Using the numeric keypad, press '1' to select the sensors configuration option.

[S1 Device] 1 : Sensors 2 : Modules



- 2 At the prompt, using the numeric keypad enter the address of the VIEW™ sensor to be edited and confirm using '5'.

[Sensor] Enter Address ____

- 3 The LCD then shows current settings and editable parameters. Using the numeric keypad, press '2' to select the 'Type' option.

Note: Use '2'/'8' to select the next/previous address respectively.

[Sensor nn - AVS] 1 : Zone (nn) 2 : Type
3 : Sensitivity 4 : [Blank/Existing Text]

- 4 The LCD then displays the VIEW™ device type selection menu. Using the numeric keypad, press '1' or '2' to select the 'AVS' or 'AVR' type respectively.

[Sensor nn - AVS] Select Type :
1 : AVS 2 : AVR < : Cancel

The display automatically returns to the previous menu, as shown below:

[Sensor nn - AVR] 1 : Zone (nn) 2 : Type
3 : Sensitivity 4 : [Blank/Existing Text]

A2.3 Changing VIEW™ Sensor Sensitivity

The following procedure describes how to configure the sensitivity levels for alarm (alarm and pre-alarm), day (alarm and pre-alarm) and sensor grouping for a VIEW™ sensor.

- 1 Follow the procedure in **Section A2.2, Learning Individual VIEW™ Sensors** to access the sensor configuration menu. The LCD shows current settings and editable parameters. Using the numeric keypad, press '3' to select the 'Sensitivity' option.

Note: Use the '2/8' buttons to select the previous/next address respectively.

[Sensor nn - AVS] 1 : Zone (nn) 2 : Type
3 : Sensitivity 4 : [Blank/Existing Text]

- 2 The LCD then displays the VIEW™ sensor Sensitivity menu. The sensitivity is displayed as two values in brackets. The first signifies the alarm level (default L5), and the second the pre-alarm level (default 5).

[Sensor nn - AVS] Sensitivity
1 : Alarm(L5,5) 2 : Day(L5,5) 3 : AVSGroup(01)

- 3 To change the 'Alarm'; 'Day' or 'AVSGroup' options, using the numeric keypad press '1', '2' or '3' respectively. If '1' (Alarm) is pressed the LCD prompts for a new 'alarm' level as follows:

[Sensor nn - AVS] Sensitivity
Enter new alarm level : ____ < : Cancel

- 4 Using the numeric keypad enter the required 'alarm' value 1 to 9, and press '5' to confirm. The LCD then automatically prompts for the 'pre-alarm' value as follows:

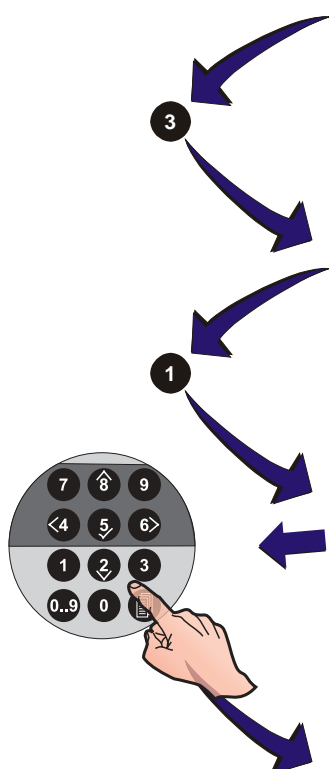
[Sensor nn - AVS] Sensitivity
Enter new prealarm level : ____ < : Cancel

- 5 Enter the required 'prealarm' value 0 to 9, and press '5' to confirm. The LCD then automatically returns to the VIEW™ sensor Sensitivity menu.

Day Mode Levels

The 'Day' option alarm levels are changed in the same manner as the 'Alarm' option.

Using the numeric keypad, press '2' to access the Day option, then follow the procedure above.



AVS Group

The AVSGroup option is used to associate a number of either AVS or AVR sensors in up to a maximum of 50 groups, see **Section 'Co-operative Multi-Sensing'**. The operation of VIEW™ sensors assigned to a group is as follows:

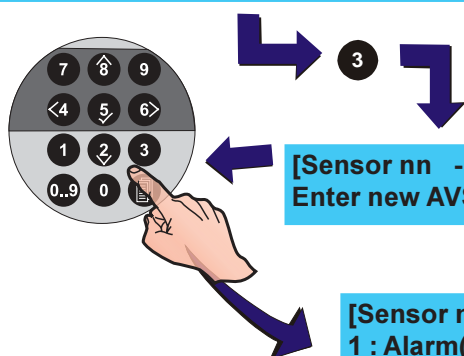
- VIEW™ sensors operate independently if the sensor is assigned to group 0.
- In a group containing both types, the AVS's desensitise if AVR's detect a sudden rise in contaminated air.
- In a group containing AVS type sensors, all sensors operate as standard VIEW™ sensors.

Note: One or more AVR's may be configured in a group.

To assign a sensor to a group:

- From the VIEW™ sensor Sensitivity menu, using the numeric keypad press '3' to access the AVSGroup option.

[Sensor nn - AVS] Sensitivity
1 : Alarm(L5,5) 2 : Day(L5,5) 3 : AVSGroup(01)



- The LCD prompts for a new AVS Group number. Use the numeric keypad to enter the required group number and press '5' to confirm.

[Sensor nn - AVS] Sensitivity
Enter new AVS Group : ____ < : Cancel

- The LCD then returns to the previous display.

[Sensor nn - AVS] Sensitivity
1 : Alarm(L5,5) 2 : Day(L5,5) 3 : AVSGroup(01)

A2.4 Automatically Learning VIEW™ Sensors

When automatically learning an SLC Loop including VIEW™ sensors, each sensor is configured as an AVS type. The LCD shows the total number of these sensors, as in the example below:

[Learn]	TOTAL	ION	OPT	TMP	MLT	AVS
	68	10	20	25	05	08

Any sensors that need to be configured to an AVR type must be changed individually, see **Section A2.2, Learning Individual VIEW™ Sensors**.



Charles Avenue
Burgess Hill
W. Sussex
RH15 9UF

T: +44 (0) 1444 230 300
F: +44 (0) 1444 230 888
E: sales@notifier.ltd.uk
www.notifier.ltd.uk

local distributor

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